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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION OF NEW RIVER UTILITY COMPANY FOR A RATE INCREASE.	DOCKET NO. W-01737A-01-0662 **STAFF'S NOTICE OF FILING TESTIMONY**

Staff of the Arizona Corporation Commission hereby files the Direct Testimony of Charles R. Myhlhousen, Joel M. Reiker and Marlin Scott, Jr., of the Utilities Division, in the above-referenced matter.

RESPECTFULLY SUBMITTED this 28th day of March, 2002.

#018532

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The original and ten (10) copies of the foregoing filed this 28th day of March, 2002, with:

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Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Arizona Corporation Commission
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COPIES of the foregoing mailed this 28th day of March, 2002 to:

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ARIZONA CORPORATION COMMISSION
UTILITIES DIVISION

DIRECT

TESTIMONY

OF

CHARLES R. MYHLHOUSEN
JOEL M. REIKER
MARLIN SCOTT, JR.

DOCKET NO. W-01737A-01-0662

MARCH 28, 2002

MYHLHOUSEN

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JIM IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF THE APPLICATION OF NEW RIVER UTILITY COMPANY FOR AN INCREASE IN ITS WATER RATES FOR CUSTOMERS WITHIN MARICOPA COUNTY, ARIZONA	)	DOCKET NO. W-01737A-01-0662

DIRECT

TESTIMONY

OF

CHARLES R. MYHLHOUSEN

PUBLIC UTILITY ANALYST II

UTILITIES DIVISION

March 28, 2002

EXECUTIVE SUMMARY
NEW RIVER UTILITY COMPANY
DOCKET NO. W-01737A-01-0662

New River Utility Company is an Arizona "C" corporation that is engaged in the business of providing public utility water service exclusively to Arizona customers in Maricopa County. The Company operates a water system in a certificated area centered in Peoria, Arizona and provides service to approximately 1,358 customers during the Test Year ended December 31, 2000.

The Company's rate application requested an increase in revenues of $344,222 or an 83.4 percent increase over Test Year revenues of $412,639. Staff recommends an increase in revenues of $204,582 or a 43.1 percent increase over adjusted Test Year revenues of $474,232. Staff's recommended operating revenue requirement is $678,817 versus the Company's $756,861, a difference of $78,044.

Staff recommends an Original Cost Rate Base of $837,572, an increase of $73,422 over the Company's proposed rate base of $764,150. Staff's recommended rate base adjustment encompasses the following major issues:

1. An increase to Plant in Service of $20,939 primarily to recognize expenses that Staff capitalized.
2. A decrease to Accumulated Depreciation of $50,049.
3. A reduction in Advances in Aid of Construction of $22,684 and a reduction to the Allowance for Working Capital of $13,527.

Staff recommends Test Year operating expenses of $466,817, a decrease of $131,177 from the Company's proposed of $597,994. At proposed rates the Company's operating expenses are $673,612 versus Staff's $605,945 or a difference of $67,667.

Staff's recommended rates result in an 8.70 percent rate of return which would increase the typical residential bill at a median usage of 9,149 gallons from $16.65 to $19.98 for an increase of $3.33 or 20.0 percent versus the Company's increase of $9.15 or a 55.0 percent increase.

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SCHEDULES

INTRODUCTION

Q. Please state your name and business address.

A. My name is Charles R. Myhlhousen. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom are you employed and in what capacity?

A. I am employed by the Utilities Division of the Arizona Corporation Commission ("Commission" or "A.C.C.") as a Public Utilities Analyst II.

Q. Please describe your work experience.

A. I began my professional career with the Internal Revenue Service as a tax auditor and was later promoted to a Revenue Agent. I was responsible for tax audits of individuals, small businesses and large corporations. Specific duties included auditing books and records, analyzing findings, interpreting tax law, discuss findings and writing reports.

In October 2000, I joined the Financial and Regulatory Analysis Section within the Utilities Division of the Commission. The Financial and Regulatory Section conducts audits and prepares reports, recommendations, and provides expert testimony on behalf of Commission Staff in evidentiary hearings. Within this framework, the Public Utility Analyst II position is responsible for conducting case preparation/analysis in rate proceedings, finance applications and Certificate of Convenience and Necessity ("CC&N") proceedings, among others.

PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. I am presenting Staff's analysis and recommendations concerning the Original Cost Rate Base (OCRB), revenue requirement and the rate design regarding the New River Utility Company's ("Company" or "New River") water rate increase application officially docketed on September 13, 2001.

Q. When was the application for rate increase filed by the Company?

A. The original application was filed on August 15, 2001. The application was deemed sufficient on September 13, 2001.

Q. What is the basis of Staff's recommendations?

A. Staff performed a regulatory audit of the Company's books and records to determine whether sufficient evidence exists to support the Company's request for an increase in its rates and charges. The regulatory audit consisted of examining Company books and records, reviewing accounting ledgers and reports, tracing recorded amounts to source documents, and verifying that the accounting principles applied are in accordance with the Commission-authorized Uniform System of Accounts ("USoA").

In the course of completing these duties, Staff conducted an on-Site audit of the Company's books and records, held numerous discussions with Company representatives and composed several written requests for data.

Q. What Test Year was used by the Company in this filing?

A. The Company used the twelve months ending December 31, 2000.

Q. Did Staff accept the Test Year as proposed by the Company?

A. Yes. The December 31, 2000, Test Year selected was the most recent fiscal year available and should present a fairly accurate representation of New River's financial operations for the determination of appropriate rates and charges.

BACKGROUND

Q. Please briefly describe the Company background.

A. The Company is an Arizona Corporation engaged in the business of providing public utility water exclusively to Arizona customers. On July 20, 1961, the Company was granted a Certificate of Convenience and Necessity for an area in the northwest area of the City of Peoria. From this location, the Company operates a water system that provided service to an average of 1,358 customers during the Test Year.

The Company has experienced exceptional growth from 338 customers in the prior Test Year ended December 31, 1998, to an average of 1,358 customers as of the current Test Year ended December 31, 2000.

SUMMARY OF PROPOSED REVENUES

Q. Please summarize the Company's proposed revenues and Staff's recommended revenues?

A. The Company is proposing operating revenues of $756,861. The Company's proposed revenue results in an increase of $344,222 or an 83.4 percent increase over Test Year revenues of $412,639, as shown on Schedule CRM-1. This would increase the typical monthly residential bill at a median usage of 9,149 gallons by $9.15 or 55 percent.

Q. Please summarize Staff's recommendation for Company water revenues.

A. Staff is recommending operating revenues of $678,814 which represents an increase of $204,582 or a 43.1 percent over adjusted revenues of $474,232. This would increase the

typical residential bill by $3.33 or 20.0 percent. Staff's recommendation results in a rate of return of 8.70 percent on the Original Cost Rate Base ("OCRB") of $837,572 versus the Company's proposed 10.89 percent rate of return on a OCRB of $764,150.

ORIGINAL COST RATE BASE

Q. Has Staff prepared a schedule detailing the Company's proposed OCRB and Staff's recommended OCRB?

A. Yes. Detail on the Company's proposed OCRB and Staff's recommended OCRB is located on Schedule CRM-2.

Q. Did the Company prepare a schedule detailing the elements of a Reconstruction Cost New less depreciation Rate Base ("RCN")?

A. No. The Company did not file a RCN schedule. Therefore, the Company waived its right to consideration of RCN in the determination of Fair Value Rate Base ("FVRB") according to Commission rules. Consequently, OCRB is the same as FVRB.

Q. Is Staff recommending a different OCRB than that proposed by the Company?

A. Yes. The Company proposed an OCRB of $764,150 Staff is recommending an OCRB of $837,572, or a difference of $73,422.

Q. Please identify Staff's individual adjustments to rate base.

A. Staff's adjustment A increased Plant in Service by $20,939. Adjustment B decreased Accumulated Depreciation by $50,049. Adjustment C decreased Advances in Aid of Construction by $22,684. Adjustment D increased Deferred Taxes by $6,722. Adjustment E decreased Working Capital Allowance by $13,526. For discussion of adjustments to Plant in Service and Accumulated Depreciation (adjustment A and B),

please refer to the Plant in Service and Accumulated Depreciation sections of this testimony.

Q. Please explain Adjustment C to the AIAC account.

A. Adjustment C decreases the AIAC balance by $22,684, from $3,328,575 to $3,305,891. This adjustment decreases the gross AIAC to reflect the amounts repaid on main extension agreements.

Q. Please explain Adjustment D to the Deferred Income Taxes.

A. Adjustment D records Deferred Income Taxes of $6,722 omitted in the Company's application. This adjustment is the result of the use of higher depreciation rates for tax purposes than for ratemaking.

Q. Please explain Adjustment E to the Allowance for Working Capital.

A. Staff reduced the Company's operation and maintenance portion of the Allowance for Working Capital by $13,527, consistent with Staff's recommended operating expenses.

PLANT IN SERVICE

Q. Please summarize Staff's recommended Plant in Service as shown on Schedule CRM-3.

A. Staff's recommended Plant in Service results in an increase of $20,939 from the Company's proposed figure of $4,310,871 to Staff's recommended figure of $4,331,809. The difference between Staff's recommended and the Company's proposed figures the result of reclassifications from operating expenses to Plant in Service.

Q. Please explain Staff's adjustments to Plant in Service.

A. Staff's adjustment A increased Transmission and Distribution Mains by $19,022 from $1,123,616 to $1,142,638. This adjustment consisted of reclassifying $16,637 from Inspection Fees expense account to Transmission and Distribution Mains. The second part of this adjustment reclassified $2,385 from Contractual Services–Other to Transmission and Distribution Mains.

Staff's adjustment B reclassified $1,917 from Contractual Service Other for the purchase of water meters. Staff increased the Meters account by $1,917 from $102,281 to $104,198.

ACCUMULATED DEPRECIATION

Q. Please explain Staff's adjustment to Accumulated Depreciation.

A. Staff decreased the Company's proposed Accumulated Depreciation amount by $50,049 from $279,079 to $229,030. Staff's Accumulated depreciation amount was calculated by adding depreciation expense for 1999 and 2000 of $39,991 and $71,721 respectively to the Commission approved Accumulated Depreciation balance in the prior Test Year ended December 31, 1998, of $117,318.

OPERATING REVENUE

Q. Did Staff prepare a schedule showing the Company's Test Year revenues and Staff's recommended Test Year revenues?

A. Yes. This information is found on Schedule CRM-5, page 1 of 4. Schedule CRM-5, page 1 of 4 shows both the Company as (filed) and Staff's recommended revenues and expenses at present and proposed Rates.

Q. Is Staff recommending any changes to the Company's Test Year operating revenue?

A. Yes. Staff's adjustment A increased Metered Residential Sales by $39,010 to reflect the annualization of customers at the end of the Test Year. Adjustment B increased Standpipe sales by $22,583 to reflect the approved tariff rate of $1.50 per 1,000 gallons versus the Company's erroneous charge of $1.00 per 1,000 gallons.

Q. Is Staff recommending any changes to the Company's proposed Operating Revenue?

A. Yes. Staff's adjustment AA reflects Staff's recommended metered revenues necessary to achieve a rate of return of 8.70 percent.

Q. Please explain Staff's adjustment to Miscellaneous Service revenue?

A. Staff's adjustment BB decreased Miscellaneous Service Revenue by $8,875 from $17,750 to $8,875. The Company's proposed Service Charges in most categories reflect a 100 percent increase. In Staff's opinion, the Company's proposed fees are excessive and do not accurately reflect the cost of providing those services. Consequently, Staff recommends the currently approved Service Charges.

OPERATING EXPENSES

Q. Did Staff prepare a schedule showing the Company's proposed operating expenses and Staff's recommended operating expenses?

A. Yes. This information is found in Schedule CRM-5.

Q. Is Staff recommending any changes to the Company's Test Year and proposed operating expenses?

A. Yes. Staff is recommending an operating expense level in the Test Year of $466,817 or a difference of $131,177. At proposed rates, Staff recommended an operating expense level of $605,945 or a difference of $67,667.

Q. Please explain the Company's proposed pro forma adjustment to Salaries and Wages.

A. The Company is requesting an increase in Salaries of $88,000 to bring the manager/owner's salary from $12,000 to $70,000. The Company is also requesting an additional employee to assist with administrative duties as well as with meter reading at a yearly salary of $30,000.

Q. Does Staff agree with the Company's pro forma increase of $88,000 to Salaries and Wages?

A. Yes, Staff believes that due to the tremendous growth that New River is experiencing, the requested increase in the manager/owner's salary and the funding of the new position is justified in order for the Company to provide adequate service to its customers.

Q. Please explain Staff's adjustment C to Purchased Power.

A. Staff's adjustment C increased Purchased Power by $6,881 to reflect the increased expense due to the annualization of customers.

Q. Please explain Staff's adjustment D to Material and Supplies.

A. Staff's adjustment D represents the removal of an invoice from Wheeler Construction of $2,913 to clean out a fountain at the entrance of the residential housing sub-division.

Q. Please explain Staff's adjustment E to Postage expense.

A. Staff increased this account by $415 consistent with the annualization of customers.

Q. Please explain Staff's adjustment F to Office Supplies.

A. Staff's adjustment F reduced Office Supplies expense by $2,002 to reconcile the amount shown in the instant application to the amount in the general ledger.

Q. Please explain Staff's adjustment G to Contractual Services-Testing.

A. Staff reclassified $16,618 to Contractual Service–Other to reflect Staff's recommended water testing expense level of $9,138. Please refer to Mr. Marlin Scott Jr.'s testimony for details as to the nature, frequency and individual costs of the tests that are included in this adjustment.

Q. Please explain Staff's adjustment H to Contractual Services-Other.

A. Staff recommended an increase of $12,316 to Contractual Service from $5,083 to $17,399. Adjustment H consisted of a reclassification of $1,917 to the Meter plant account; a reclassification of $2,385 to Transmission and Distribution plant account to capitalize cost of as built plans regarding new mains. Staff further reclassified $16,618 for labor costs from Contractual Services-Testing.

Q. Please explain the Company's pro forma adjustment to Rents expense.

A. The Company's pro forma adjustment increases this expense category by $9,600 for the lease of two trucks at $400 per month. According to the Company, the trucks are needed for the provision of service due to the growth experienced by the Company.

Q. Does Staff agree with the Company's pro forma adjustment increase?

A. Yes, Staff believes that in order to provide adequate service due to the rapid growth the Company continues to experience, the trucks are necessary.

Q. Please explain Staff's adjustment I to Rate Case Expense.

A. Staff recommends that Rate Case expense be amortized over a period of two years or $5,000 annually. Staff usually amortize rate case expense over a three year period,

however, in this case the Company historically been filing a rate case every two years, Consequently in Staff's opinion, the use of a two year amortization period is reasonable.

Q. Please explain Staff's adjustment J to Inspection Fees.

A. Staff reclassified Inspection Fees of $16,637 to Transmission and Distribution Mains plant account. The inspection fees should be capitalized along with the cost of the mains.

Q. Please explain Staff's Adjustment K to Property Taxes.

A. At proposed rates, Staff increased the Company's Property Tax expense by $5,557 from $21,341 to $27,008. Staff used the Arizona Department of Revenue ("ADOR") new modified methodology for determining full cash value for property tax purposes. This formula use an average of three years of reported gross revenue multiplied by a factor of two as a basis for assessed value. The process results in a full cash value amount to which an assessment ratio and finally the tax rate are applied. A three year average of gross revenue was calculated resulting in a property tax expense level of $27,008.

Q. Please explain Staff's adjustment L to Depreciation Expense.

A. At present rates Staff decreased Depreciation expense by $109,581 from $181,302 to $71,721 consistent with the depreciation rates approved in Decision No. 62449 dated April 14, 2000. At proposed rates, Staff decreased Depreciation expense by $829 consistent with Staff's recommended depreciation rates found in the testimony of Mr. Marlin Scott Jr. At present and proposed rates Staff's depreciation expense calculations reflect a half-year convention which assumes depreciation expense for six-months in the year the asset was placed in service.

Q. Please explain Staff's Adjustment to Income Taxes.

A. Staff adjusted income taxes from $1,962 to $26,671, consistent with its recommended revenues and expenses.

Q. Please explain Staff's adjustment to Interest Expense.

A. Staff removed Interest Expense of $22,150. The Company's application included interest expense regarding for unauthorized debt. In conversations with Company representatives, they agreed to reclassify the debt to paid in capital and not seek Commission approval through a financing application.

RATE DESIGN

Q. Has Staff prepared a schedule showing the Company's proposed rates and charges and Staff's proposed rates and charges?

A. Yes. Please refer to Schedule CRM-6.

Q. Has Staff recommended a change in the Company's proposed service charges?

A. Yes. Staff believes that the Company's proposed increase of 100 percent in the service establishment service charge as well as an increase of 71 percent in the reconnection fee are excessive. In addition, the Company did not justify such an increase. Consequently, Staff is recommending the existing service charges.

Q. Has Staff prepared a schedule representative of the typical bill under the Company's proposed and Staff's recommended rates?

A. Yes. Please refer to Schedule CRM-7, pages 1 through 4. The typical residential bill as shown in Schedule CRM-7, page 1 reflects an increase at the median usage of $3.33 versus the Company's increase of $9.15.

STAFF RECOMMENDATIONS

Q. Please summarize Staff's recommendations in this proceeding.

A. Staff recommends that the Commission approve Staff's rates and charges as shown on Schedule CRM-6.

Staff further recommends that the Company be authorized an operating income of $72,869 consistent with Staff's adjustments to rate base and operating expenses.

Staff further recommends a fair value rate of return of 8.70 percent on an OCRB of $837,572.

Staff further recommends a provision be included in the Company's tariff to allow for the flow-through of all appropriate state and local taxes as provided for in A.A.C. Rule 14-2-409(D)(5).

Staff recommends that the Company be ordered to notify its customers of the rates and charges approved by the Commission and the effective date by means of an insert in its next regular monthly billing following a decision in this matter. The Company shall also file a copy of this notice with the Utilities Division Compliance Section within 60 days of the effective date of a decision in this case.

Staff Engineering recommends that before any new rate increase goes into effect for this proceeding the Company should submit to the Director of the Utilities division MCESD documentation stating that its water system is delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act standards.

Staff recommends the Company adopt the Depreciation Rates in Mr. Marlin Scott Jr. testimony.

Staff recommends that the Company file a Curtailment Plan Tariff, as shown is Mr. Marlin Scott Jr. testimony for approval within 90 days after the effective date of any decision and order pursuant to this proceeding.

Q. Does this conclude your direct testimony?

A. Yes, it does.

NEW RIVER UTILITY COMPANY, INC.
DOCKET NO. W-01737-01-0662
TEST YEAR ENDED DECEMBER 31, 2000

SCHEDULE CRM-1

SUMMARY OF FILING

LINE NO.	DESCRIPTION	Present Rates Company As Filed	Present Rates Staff Adjusted	Proposed Rates Company as Filed	Proposed Rates Staff Adjusted
1	Revenues:				
2	Metered -Residential	$ 252,254	$ 291,264	$448,220	$373,326
3	Metered Commercial	106,345	106,345	200,560	206,282
4	Metered-Standpipe	45,165	67,748	90,331	90,331
5	Misc. Service Revenue	8,875	8,875	17,750	8,875
6	Total Operating Revenue	$ 412,639	$ 474,232	$756,861	$678,814
7	Operating Expenses:				
8	Operation & Maintenance	$ 379,029	355,471	379,029	$355,471
9	Depreciation	181,302	71,721	181,302	180,473
10	Taxes Other than Income	37,663	37,663	37,663	43,330
11	Income Tax	-	1,962	75,618	26,671
12	Total Operating Expenses	$ 597,994	$ 466,817	$673,613	$605,945
13	**OPERATING INCOME (LOSS)**	$(185,355)	$ 7,415	$ 83,247	$ 72,869
14	Rate Base - O.C.R.B.	$ 764,150	$ 837,572	$764,150	$837,572
15	Rate of Return - O.C.R.B.	N/A	N/A	10.89%	8.70%
16	REQUIRED OPERATING INCOME	N/A	N/A	$ 83,247	$ 72,869

NEW RIVER UTILITY COMPANY, INC.
DOCKET NO. W-01737-01-0662
TEST YEAR ENDED DECEMBER 31, 2000

SCHEDULE CRM-2

ORIGINAL COST RATE BASE

LINE NO.	DESCRIPTION	ORIGINAL COST COMPANY AS FILED	STAFF ADJUSTMENTS	REF	STAFF ADJUSTED
1	Gross Utility Plant in Service	$ 4,310,871	$ 20,938	A	$ 4,331,809
2	Less:				
3	Accumulated Depreciation	279,079	(50,049)	B	229,030
4	Net Utility Plant in Service	$ 4,031,792	$ 70,987		$ 4,102,779
5					
6	Less:				
7	Contribution In Aid Of Construction	0			0
8	Less Amortization of CIAC	0			0
9	Net CIAC	0	0		0
10					
11	Less:				
12	Advances in Aid of Construction	3,328,575	(22,684)	C	3,305,891
13	Deferered Income Taxes	-	6,722	D	6,722
14	Total Deductions	3,328,575	15,962		3,312,613
15					
16	Plus:				
17	Allowance for Working Capital:				
18	1/24 Pumping Power Expense	3,929			3,929
19	1/8 of Operation & Maintenance	57,004	(13,527)	E	43,477
20	Original Cost Rate Base	$ 764,150	$ 73,422		$ 837,572

NEW RIVER UTILITY COMPANY, INC.
DOCKET NO. W-01737-01-0662
TEST YEAR ENDED DECEMBER 31, 2000

SCHEDULE CRM-3

UTILITY PLANT IN SERVICE

LINE NO.	DESCRIPTION	Company As Filed	Staff Adjustments	REF	Staff as Adjusted
1	Intangibles	$ -			$ -
2	Land & Land Rights	75,181			75,181
3	Structures & Improvements	61,495			61,495
4	Wells & Springs	795,021			795,021
5	Pumping Equipment	677,454			677,454
6	Water Treatment Equipment	0			0
7	Distribution Reserviors	1,028,877			1,028,877
8	Transmission & Distribution Mains	1,123,616	19,022	A	1,142,638
9	Services	236,325			236,325
10	Meters	102,281	1,917	B	104,198
11	Hydrants	193,193			193,193
12	Office Furniture & Fixtures	17,428			17,427
13	Transportation Equipment	0			0
14	Tools & Work Equipment	0			0
15	Power Operated Equipment	0			0
16	Communication Equipment	0			0
17	Other tangible Plant	0			0
	Total Gross Utility Plant in Service	$ 4,310,871	$ 20,939		$4,331,809

NEW RIVER UTILITY COMPANY, INC.
DOCKET NO. W-01737-01-0662
TEST YEAR ENDED DECEMBER 31, 2000

SCHEDULE CRM-4

ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	AMOUNT
1	Accumulated Depreciation - Per Company	$ 279,079
2	Accumulated Depreciation - Per Staff	229,030
3	Total Adjustment	$ (50,049)

NEW RIVER UTILITY COMPANY, INC.
DOCKET NO. W-01737-01-0662
TEST YEAR ENDED DECEMBER 31, 2000

SCHEDULE CRM-5

STATEMENT OF OPERATING INCOME

LINE NO.	DESCRIPTION	Present Rates COMPANY AS FILED	STAFF ADJS	REF	STAFF ADJUSTED	Proposed Rates COMPANY AS FILED	STAFF ADJS	REF	STAFF ADJUSTED
1	Operating Revenues:								
2	Metered-Residential	$ 252,254	$ 39,010	A	$ 291,264	$ 448,220	$ (74,894)	AA	$ 373,326
3	Metered-Commercial	106,345			106,345	200,560	5,722	AA	206,282
4	Metered-Standpipe	45,165	22,583	B	67,748	90,331	-		90,331
5	Misc. Service Revenue	8,875			8,875	17,750	(8,875)	BB	8,875
6	Total Operating Revenues	$ 412,639	$ 61,593		$ 474,232	$ 756,861	$ (78,047)		$ 678,814
7									
8	Operating Expenses:								
9	Salaries & Wages	140,103	-		140,103	140,103	-		140,103
10	Purchased Power	94,303	6,881	C	101,184	94,303	6,881	C	101,184
11	Chemicals	2,438	-		2,438	2,438	-		2,438
12	Materials & Supplies	8,631	(2,913)	D	5,718	8,631	(2,913)	D	5,718
13	Telephone	2,307	-		2,307	2,307	-		2,307
14	Payroll Service	376	-		376	376	-		376
15	Postage	3,322	415	E	3,737	3,322	415	E	3,737
16	Temporaty Labor	592	-		592	592	-		592
17	Office Suplies	3,091	(2,002)	F	1,089	3,091	(2,002)	F	1,089
18	Contractual Services-Professional	580	-		580	580	-		580
19	Contractual Services-Accounting	16,000	-		16,000	16,000	-		16,000
20	Contractual Services-Legal	5,174	-		5,174	5,174	-		5,174
21	Contractual Services-Testing	25,756	(16,618)	G	9,138	25,756	(16,618)	G	9,138
22	Contractual Services-Other	5,083	12,316	H	17,399	5,083	12,316	H	17,399
23	Rents	27,600	-		27,600	27,600	-		27,600
24	Insurance Expense	5,448	-		5,448	5,448	-		5,448
25	Regulatory Commission Expense	5,955	-		5,955	5,955	-		5,955
26	Rate Case Expense	10,000	(5,000)	I	5,000	10,000	(5,000)	I	5,000
27	Inspection Fees	16,637	(16,637)	J	0	16,637	(16,637)	J	0
28	Bank Charges	1,432	-		1,432	1,432	-		1,432
29	Blue Stakes	684	-		684	684	-		684
30	Misc. Oper. Expense-Other	3,517	-		3,517	3,517	-		3,517
31	Taxes other than Property or Inco	16,322	-		16,322	16,322	-		16,322
32	Property taxes	21,341	-		21,341	21,341	5,667	K	27,008
33	Depreciation	181,302	(109,581)	L	71,721	181,302	(829)	LL	180,473
34	Income Taxes	0	1,962	M	1,962	75,618	(48,947)	MM	26,671
35	Total Operating Expenses	597,994	(131,177)		466,817	673,612	(67,667)		605,945
36	**Operating Income (Loss)**	$ (185,355)	$192,770		$ 7,415	$ 83,249	$ (10,380)		$ 72,869
37									
38	Other Income(/Expenses)								
39	Interest Expense	(22,150)	22,150	N	-	(22,150)	22,150	N	-
40	**Net Income(Loss)**	$ (207,505)	$214,920		$ 7,415	$ 61,099	$ (55,897)		$ 72,869

STAFF ADJUSTMENTS

A	METERED WATER REVENUE-RESIDENTIAL - per Company	$252,254	
	- per Staff	291,264	$39,010
	To annualize revenues based on end of year cutomers.		
B	METERED STANDPIPE REVENUE - per Company	$45,165	
	- per Staff	67,748	$22,583
	To adjust to Staff's bill count revenue consistent with tha approved tariff rate of $1.50 per 1,000.		
AA	METERED WATER REVENUE-RESIDENTIAL - per Company	$ 448,220	
	- per Staff	373,326	$ (74,894)
	To adjust to Staff's recommended revenue requirement.		
AA	METERED WATER REVENUE COMMERCIAL - per Company	$200,560	
	- per Staff	206,282	$5,722
	To adjust to Staff's recommended revenue requirement.		
BB	MISC. SERVICE REVENUES - per Company	$ 17,750	
	- per Staff	8,875	$ (8,875)
	To adjust to Staff's recommended service charges.		
C	PURCHASED POWER - per Company	$94,303	
	- per Staff	101,184	$6,882
	Due to annualization of customers.		
D	MATERIALS AND SUPPLIES - per Company	$8,631	
	- per Staff	5,718	($2,913)
	To remove invoice not related to the provision of water service.		
E	POSTAGE - per Company	$3,322	
	- per Staff	3,737	$415
	Due to annualization of customers.		
F	OFFICE SUPPLIES - per Company	$3,091	
	- per Staff	1,089	($2,002)
	To reconcille account to general ledger amount.		

STAFF ADJUSTMENTS (Cont.)

G	CONTRACTUAL SERVICES TESTING - per Company	$25,756	
	- per Staff	9,138	($16,618)

To reflect Engineering Staff's water testing calculation.

H	CONTRACTUAL SERVICES OTHER - per Company	$5,083	
	- per Staff	17,399	$12,316

To reclassify cost meters of $1,917 to plant in service; to reclassify cost of new main as built plans of $2,385 to plant in service, to reclassify labor cost of $16,618 from Contractual ServicesTesting.

I	RATE CASE EXPENSE - per Company	$10,000	
	- per Staff	5,000	($5,000)

To amortized over two years.

J	INSPECTION FEES - per Company	$16,637	
	- per Staff	0	($16,637)

To reclassify cost of inspection of new transmission and distribution lines to plant in service.

K	PROPERTY TAXES - per Company	$21,341	
	- per Staff	27,008	$5,667

To adjust to due to Staff's recommended increase in revenues.

L	DEPRECIATION EXPENSE - per Company	$ 181,302	
	- per Staff	71,721	$ (109,581)

To adjust to Commission approved depreciation rates in the Company's last rate case.

LL	DEPRECIATION EXPENSE - per Company	$ 181,302	
	- per Staff	180,473	$ (829)

To adjust to Staff's recommended depreciation rates.

M	INCOME TAXES - per Company	0	
	- per Staff	1,962	$ 1,962

To adjust consistent with Staff's recommended Test Year taxable income.

MM	INCOME TAXES - per Company	$ 75,618	
	- per Staff	26,671	$ (48,947)

To adjust consistent with Staff's recommended taxable income at proposed rates.

N	INTEREST EXPENSE - per Company	$22,150	
	Per Staff	0	($22,150)

To remove interest on loan converted to paid in capital.

NEW RIVER UTILITY COMPANY, INC. SCHEDULE CRM-6
DOCKET NO. W-01737-01-0662
TEST YEAR ENDED DECEMBER 31, 2000

RATE DESIGN

LINE NO		Present Rates	Proposed Rates Company	Proposed Rates Staff
1	**Monthly Usage Charge**			
2	5/8 x3/4" - Meter	$7.50	$7.50	$ 9.00
3	3/4" "	7.50	7.50	9.00
4	1" "	18.75	18.75	28.50
5	1-1/2" "	37.50	37.50	72.75
6	2" "	60.00	60.00	120.00
7	3" "	120.00	120.00	150.00
8	4" "	190.00	190.00	190.00
9	6" "	375.00	375.00	375.00
10	8" "	750.00	750.00	750.00
11	**Gallons in Minimum**	0	0	0
12	**Commodity Rates -** per 1,000 gallons			
13	From 1 to 18,000 gallons	$ 1.00	$ 2.00	$ 1.20
14	From 18,001 to 25,000 gallons	1.00	2.00	1.50
15	In excess of 25,000 gallons	1.00	2.00	2.00
16	**Standpipe Rate -** per 1,000 gallons	$ 1.50	$ 2.00	$ 2.00
17	**Service Line and Meter Installation Charges**			
18	5/8 x3/4" Meter	$ 410.00	$ 410.00	$ 410.00
19	3/4" Meter	410.00	410.00	410.00
20	1" Meter	520.00	520.00	520.00
21	1-1/2" Meter	660.00	660.00	660.00
22	2" Meter	1,155.00	1,155.00	1,155.00
23	2" Meter Compound	1,720.00	1,720.00	1,720.00
24	3" Meter	1,625.00	1,625.00	1,625.00
25	3" Meter Compound	2,260.00	2,260.00	2,260.00
26	4" Meter	2,500.00	2,500.00	2,500.00
27	4" Meter Compound	3,200.00	3,200.00	3,200.00
28	6" Meter	4,500.00	4,500.00	4,500.00
29	6" Meter Compound	6,300.00	6,300.00	6,300.00
30	8" Meter	8,200.00	8,200.00	8,200.00
31	**Service Charges**			
32	Establishment	$ 25.00	$ 50.00	$ 25.00
33	Establishment (After Hours)	35.00	60.00	35.00
34	Reconnection (Delinquent)	35.00	60.00	35.00
35	Deposit	*	*	*
36	Deposit Interest	*	*	*
37	Re-establishment (Within 12 months)	**	**	**
38	NSF Check	15.00	15.00	15.00
39	Deferred Payment	1.50%	1.50%	1.50%
40	Meter Test (If Correct)	40.00	40.00	40.00
41	Meter Re-Read (If Correct)	20.00	20.00	20.00
42	Late charge (Per Month)	1.50%	1.50%	1.50%
43	Fire Sprinkler rate	***	***	***

44 * Per Commission Rules (R14-2-403.B
45 ** Months off system times the minimum (R14-2-403.D)
46 *** 1.00% of Monthly Minimum for a comparable Size Meter Connection
47 but no less that $5.00 per month. The Service Charge for Fire Sprinklers
48 is only applicable for service lines separate and distinct from the primary
49 water service line.

New River Utility Company
Docket No. W-01737A-01-0662
Test Year Ended December 31, 2000

Schedule CRM-7
Page 1 of 4

TYPICAL BILL ANALYSIS

General Service 5/8 X 3/4 - Inch Meter

Average Number of Customers: 1285

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	10,238	$17.74	$27.98	$10.24	57.7%
Median Usage	9,149	$16.65	$25.80	$9.15	55.0%
Staff Proposed					
Average Usage	10,238	$17.74	$21.29	$3.55	20.0%
Median Usage	9,149	$16.65	$19.98	$3.33	20.0%

Present & Proposed Rates (Without Taxes)
General Service 5/8 X 3/4 - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Proposed Rates	% Increase
0	$7.50	$7.50	0.0%	$9.00	20.0%
1,000	8.50	9.50	11.8%	10.20	20.0%
2,000	9.50	11.50	21.1%	11.40	20.0%
3,000	10.50	13.50	28.6%	12.60	20.0%
4,000	11.50	15.50	34.8%	13.80	20.0%
5,000	12.50	17.50	40.0%	15.00	20.0%
6,000	13.50	19.50	44.4%	16.20	20.0%
7,000	14.50	21.50	48.3%	17.40	20.0%
8,000	15.50	23.50	51.6%	18.60	20.0%
9,000	16.50	25.50	54.5%	19.80	20.0%
10,000	17.50	27.50	57.1%	21.00	20.0%
15,000	22.50	37.50	66.7%	27.00	20.0%
20,000	27.50	47.50	72.7%	33.60	22.2%
25,000	32.50	57.50	76.9%	41.10	26.5%
50,000	57.50	107.50	87.0%	91.10	58.4%
75,000	82.50	157.50	90.9%	141.10	71.0%
100,000	107.50	207.50	93.0%	191.10	77.8%
125,000	132.50	257.50	94.3%	241.10	82.0%
150,000	157.50	307.50	95.2%	291.10	84.8%
175,000	182.50	357.50	95.9%	341.10	86.9%
200,000	207.50	407.50	96.4%	391.10	88.5%

TYPICAL BILL ANALYSIS

General Services One - Inch Meter

Average Number of Customers: 36

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	16,553	$35.30	$51.86	$16.56	46.9%
Median Usage	9,556	$28.31	$37.86	$9.55	33.7%
Staff Proposed					
Average Usage	16,553	$35.30	$48.36	$13.06	37.0%
Median Usage	9,556	$28.31	$39.97	$11.65	41.2%

Present & Proposed Rates (Without Taxes)
General Services One - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Proposed Rates	% Increase
0	$18.75	$18.75	0.0%	$28.50	52.0%
1,000	19.75	20.75	5.1%	29.70	50.4%
2,000	20.75	22.75	9.6%	30.90	48.9%
3,000	21.75	24.75	13.8%	32.10	47.6%
4,000	22.75	26.75	17.6%	33.30	46.4%
5,000	23.75	28.75	21.1%	34.50	45.3%
6,000	24.75	30.75	24.2%	35.70	44.2%
7,000	25.75	32.75	27.2%	36.90	43.3%
8,000	26.75	34.75	29.9%	38.10	42.4%
9,000	27.75	36.75	32.4%	39.30	41.6%
10,000	28.75	38.75	34.8%	40.50	40.9%
15,000	33.75	48.75	44.4%	46.50	37.8%
20,000	38.75	58.75	51.6%	53.10	37.0%
25,000	43.75	68.75	57.1%	60.60	38.5%
50,000	68.75	118.75	72.7%	110.60	60.9%
75,000	93.75	168.75	80.0%	160.60	71.3%
100,000	118.75	218.75	84.2%	210.60	77.3%
125,000	143.75	268.75	87.0%	260.60	81.3%
150,000	168.75	318.75	88.9%	310.60	84.1%
175,000	193.75	368.75	90.3%	360.60	86.1%
200,000	218.75	418.75	91.4%	410.60	87.7%

TYPICAL BILL ANALYSIS

General Services 1 1/2 - Inch Meter

Average Number of Customers: 2

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	174,192	$211.69	$385.88	$174.19	82.3%
Median Usage	60,000	$97.50	$157.50	$60.00	61.5%
Staff Proposed					
Average Usage	174,192	$211.69	$403.23	$191.54	90.5%
Median Usage	60,000	$97.50	$174.85	$77.35	79.3%

Present & Proposed Rates (Without Taxes)
General Services 1 1/2 - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Proposed Rates	% Increase
0	$37.50	$37.50	0.0%	$72.75	94.0%
1,000	38.50	39.50	2.6%	73.95	92.1%
2,000	39.50	41.50	5.1%	75.15	90.3%
3,000	40.50	43.50	7.4%	76.35	88.5%
4,000	41.50	45.50	9.6%	77.55	86.9%
5,000	42.50	47.50	11.8%	78.75	85.3%
6,000	43.50	49.50	13.8%	79.95	83.8%
7,000	44.50	51.50	15.7%	81.15	82.4%
8,000	45.50	53.50	17.6%	82.35	81.0%
9,000	46.50	55.50	19.4%	83.55	79.7%
10,000	47.50	57.50	21.1%	84.75	78.4%
15,000	52.50	67.50	28.6%	90.75	72.9%
20,000	57.50	77.50	34.8%	97.35	69.3%
25,000	62.50	87.50	40.0%	104.85	67.8%
50,000	87.50	137.50	57.1%	154.85	77.0%
75,000	112.50	187.50	66.7%	204.85	82.1%
100,000	137.50	237.50	72.7%	254.85	85.3%
125,000	162.50	287.50	76.9%	304.85	87.6%
150,000	187.50	337.50	80.0%	354.85	89.3%
175,000	212.50	387.50	82.4%	404.85	90.5%
200,000	237.50	437.50	84.2%	454.85	91.5%

TYPICAL BILL ANALYSIS
General Service 2-Inch Meter

Average Number of Customers: 35

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	195,639	$254.64	$451.28	$196.64	77.2%
Median Usage	100,963	$159.96	$261.93	$101.97	63.7%
Staff Proposed					
Average Usage	195,639	$254.64	$493.38	$238.74	93.8%
Median Usage	100,963	$159.96	$304.03	$144.07	90.1%

Present & Proposed Rates (Without Taxes)
General Service 2-Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Proposed Rates	% Increase
0	$60.00	$60.00	0.0%	$120.00	100.0%
1,000	60.00	62.00	3.3%	121.20	102.0%
2,000	61.00	64.00	4.9%	122.40	100.7%
3,000	62.00	66.00	6.5%	123.60	99.4%
4,000	63.00	68.00	7.9%	124.80	98.1%
5,000	64.00	70.00	9.4%	126.00	96.9%
6,000	65.00	72.00	10.8%	127.20	95.7%
7,000	66.00	74.00	12.1%	128.40	94.5%
8,000	67.00	76.00	13.4%	129.60	93.4%
9,000	68.00	78.00	14.7%	130.80	92.4%
10,000	69.00	80.00	15.9%	132.00	91.3%
15,000	74.00	90.00	21.6%	138.00	86.5%
20,000	79.00	100.00	26.6%	144.60	83.0%
25,000	84.00	110.00	31.0%	152.10	81.1%
50,000	109.00	160.00	46.8%	202.10	85.4%
75,000	134.00	210.00	56.7%	252.10	88.1%
100,000	159.00	260.00	63.5%	302.10	90.0%
125,000	184.00	310.00	68.5%	352.10	91.4%
150,000	209.00	360.00	72.2%	402.10	92.4%
175,000	234.00	410.00	75.2%	452.10	93.2%
200,000	259.00	460.00	77.6%	502.10	93.9%

REIKER

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JIM IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF THE APPLICATION OF NEW RIVER WATER COMPANY, INC. FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR WATER UTILITY SERVICES	)))))	DOCKET NO. W-01737A-01-0662

DIRECT

TESTIMONY

OF

JOEL M. REIKER

SENIOR ANALYST

UTILITIES DIVISION

MARCH 28, 2002

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SCHEDULES AND EXHIBITS

EXECUTIVE SUMMARY
OF THE DIRECT TESTIMONY
OF STAFF WITNESS
JOEL M. REIKER
NEW RIVER WATER COMPANY, INC.
DOCKET NO. W-01737A-01-0662

The direct testimony of Staff witness Joel M. Reiker addresses the following issues:

Capital Structure – Mr. Reiker recommends the Commission adopt a capital structure consisting of 100.0 percent equity.

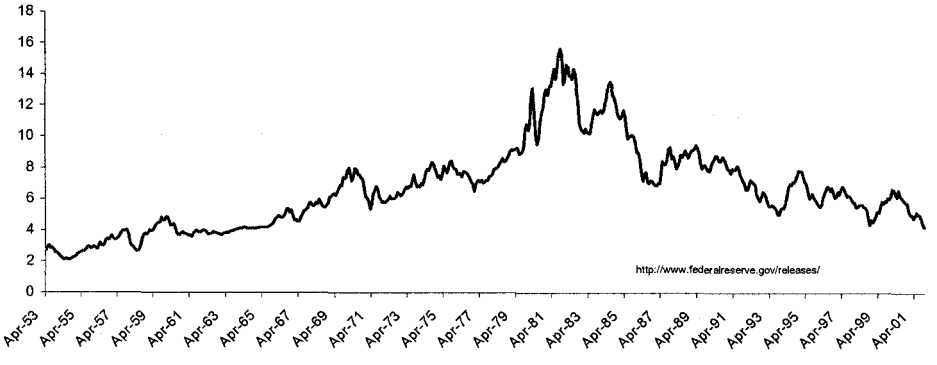
Cost of Equity – Mr. Reiker recommends the Commission adopt a 8.7 percent return on equity ("ROE"). Mr. Reiker bases his return on equity recommendation on his discounted cash flow ("DCF") and capital asset pricing model ("CAPM") analyses. His recommended ROE range is 8.7 percent to 9.4 percent.

Overall Rate of Return – Mr. Reiker recommends the Commission adopt an overall rate of return of 8.7 percent. This represents a fair and reasonable rate of return on New River's rate base.

Comment on the Company's Proposed Return on Equity – The Company requests a 12.5 percent ROE in this proceeding. According to responses to Staff data requests, the Company determined that its requested ROE of 12.5 percent was reasonable based on conversations with Staff. The Company's requested ROE is unreasonable because only the most recent cost of equity is relevant at any given time.

According to the CAPM, the cost of equity moves in the same direction as interest rates. The chart below puts interest rates into historical perspective. Interest rates have declined significantly, and are currently at their lowest level since the 1960's. This would suggest that capital costs, including the cost of equity, are lower than they have been in decades.

Chart 2: History of 5- and 10-Year Treasury Yields



INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Joel M Reiker. I am a Senior Regulatory Analyst employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Senior Regulatory Analyst.

A. In my capacity as a Senior Regulatory Analyst, I provide Staff recommendations to the Commission on mergers, acquisitions, financings and sales of assets. I also perform studies to estimate the cost of capital for utilities that are seeking rate relief.

Q. Please describe your educational background and professional experience.

A. In 1998, I graduated cum laude from Arizona State University, receiving a Bachelor of Science degree in Global Business with a specialization in finance. My course of studies included classes in corporate and international finance, investments, accounting, statistics, and economics. In 1999, after working as an internal auditor for one year, I was employed by the Commission as an Auditor III in the Accounting & Rates Section's Financial Analysis Unit. Since that time, I have attended various seminars and classes on general regulatory and business issues, including the cost of capital and the use of energy derivatives. I was promoted to a Senior Rate Analyst in December 2000.

Q. What is the scope of your testimony in this case?

A. I provide Staff's recommended rate of return in this case. I address the appropriate capital structure, as well as the appropriate cost of equity and overall rate of return for setting rates for New River Utility Company ("New River" or "Company").

SUMMARY OF TESTIMONY AND RECOMMENDATIONS

Q. Briefly summarize how your cost of capital testimony is organized.

A. My cost of capital testimony is organized into five sections. Section I discusses the Company's capital structure. Section II discusses risk and presents the findings of my cost of equity capital analysis, in which I used the discounted cash flow ("DCF") model and the capital asset pricing model ("CAPM"). In section III, I present Staff's recommended return on equity ("ROE") for New River. In section IV, I present Staff's overall rate of return ("ROR") recommendation. Finally, I provide Staff's comments on the Company's proposed ROE in section V.

Q. Have you prepared any exhibits to your testimony?

A. Yes. I prepared schedules JMR-1 through JMR-9 that support Staff's cost of capital analysis.

Q. Please summarize Staff's ROR recommendations.

A. Staff's ROR recommendation is summarized in the following table:

Table 1

	Weight	Cost	Weighted Cost
Long-term Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	8.7%	8.7%
Cost of Capital			**8.7%**

I. NEW RIVER'S CAPITAL STRUCTURE

Q. What is Staff's recommended capital structure?

A. Staff's recommended capital structure is the following:

Table 2

Capital Source	Percentage
Long-term Debt	0.0%
Common Equity	100.0%
	100.0%

Q. Is this the same capital structure proposed by the Company?

A. No. According to its application, the Company proposes a capital structure consisting of 35.6 percent debt and 64.4 percent equity.

Q. Is the Company's proposed capital structure the same capital structure reported in its December 31, 2000, Annual Report to the Commission?

A. No. According to its December 31, 2000 Annual Report to the Commission, New River's capital structure consisted of 100 percent equity.

Q. How does the Company's proposed capital structure reconcile with the capital structure reported in its annual report?

A. According to its application, the Company received $202,967 from a related party in the form of long-term debt. This amount was not approved by the Commission and is not reflected in the company's December 31, 2000 Annual Report to the Commission. When asked to explain the discrepancy between its application and its annual report, the Company stated that the $202,967 was contributed, and should therefore be reclassified as equity.

. . .

Q. Does Staff have any recommendations with regard to the $202,967 contributed by a related party?

A. Yes. Staff recommends that the Commission require the Company to officially reclassify the $202,967 as additional paid-in capital.

II. THE COST OF EQUITY

Capital Structure and Risk

Q. How is risk defined?

A. Risk is defined in modern portfolio theory as the sensitivity of an investment's returns to market returns. The most prevalent measure of risk is "beta." Beta is the measurement of an investment's market risk, and it reflects both the business risk and financial risk of a firm.[1]

Unique risk, or microeconomic risk, is risk that can be eliminated by portfolio diversification, i.e. buying securities in portfolios. Unique risk is not measured by beta nor does it factor into the cost of equity because it can be eliminated through simple diversification. Unique risks are peculiar to an individual company or investment project. Investors who hold diversified portfolios do not worry about unique risk; therefore, it does not affect the cost of capital. Additionally, investors who choose to be less than fully diversified will not be compensated for unique risk.[2]

[1] Brealey, Richard, A. Stewart Myers. *Principles of Corporate Finance*. McGraw-Hill, New York. 1988. p. 134.
[2] Harrington, Diana R. *Modern Portfolio Theory, the Capital Asset Pricing Model, and Arbitrage Pricing Theory: A User's Guide*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey. 1987. p. 16.

Q. What is market risk?

A. Market risk, also known as systematic risk, is the risk related to economy-wide perils that threaten all businesses, such as changes in interest rates, inflation, and general business cycles. Market risk cannot be avoided regardless of how diversified a portfolio is. Market risk is the only risk that affects the cost of equity. Market risk includes business risk and financial risk.

Q. Please distinguish between business risk and financial risk.

A. Business risk is the risk associated with the fluctuation in earnings due to the basic nature of the firm's business. Financial risk is the risk to shareholders caused by a firm's reliance on debt financing. Both business risk and financial risk affect the cost of capital.

Q. What is the relationship between the capital structure and financial risk?

A. A greater percentage of debt in a capital structure results in a greater level of financial risk.

Q. How does New River's capital structure compare to capital structures of publicly traded water companies?

A. Staff's recommended capital structure for New River has a much greater percentage of equity than the average capital structure of publicly traded water companies; therefore, New River has a lower level of financial risk. Schedule JMR-1 shows the capital structures of eight publicly traded water companies ("sample water companies") as of September 30, 2001, as well as Staff's recommended capital structure for New River. As of September 30, 2001, the sample water companies were capitalized with approximately 50 percent equity while Staff's recommended capital structure for New River consists of 100 percent equity.

Q. How does a lower level of financial risk affect a firm's cost of equity?

A. A lower level of financial risk results in a lower cost of equity.

Fair and Reasonable Return on Equity

Q. How do you define the term "cost of equity"?

A. A firm's cost of equity is that rate of return that investors expect to earn on their equity investment given the risk of the firm. An investor's expected return is equally defined as the return on equity that they expect on other investments of similar risk.

Q. What models did Staff use to determine New River's cost of equity?

A. Staff used two market-based models: the discounted cash flow ("DCF") model and the capital asset pricing model ("CAPM"). I applied these two models to publicly traded stocks to estimate New River's cost of equity.

Q. Did you apply the DCF model and the CAPM to New River directly?

A. No, I did not apply the models directly to New River because it does not have publicly traded stock and therefore lacks the information necessary to apply the market-based models. I used a sample of publicly traded water companies as a proxy.

Q. What companies did you select as proxies or comparables for New River?

A. I selected the eight sample water companies previously discussed in the capital structure section of this testimony. These companies represent all of the water companies currently followed by *The Value Line Investment Survey* ("*Value Line*") and *The Value Line Investment Survey Expanded Edition* ("*VL Expanded Edition*").

Discounted Cash Flow Model Analysis

Q. Please provide a brief summary of the theory upon which the DCF method of estimating the cost of equity is based.

A. The DCF method of estimating the cost of equity is based upon the theory that the market price of a stock is equal to the present value of all expected future dividends. Through a mathematical restatement, the discount rate, or cost of capital, can be derived from the expected dividends, the stock price, and a dividend growth rate. The formula is generally applied to a sample of companies that exhibit similar business risk to the company in question and the resulting estimates for the discount rates (or costs of equity) are then averaged.

Q. How did you apply the DCF Model?

A. I applied the DCF model using two different approaches. My first approach used the constant-growth DCF model. My second approach was to use a non-constant growth, or multi-stage DCF. The advantage of the multi-stage DCF is that it does not assume that dividends grow at a constant rate over time.

The Constant-Growth DCF

Q. What is the constant-growth DCF formula used in your analysis?

A. The constant-growth DCF formula used in my analysis is:

Equation 1:

$$K = \frac{D_1}{P_0} + g$$

where:
K = *the cost of equity*
D_1 = *the expected annual dividend*
P_0 = *the current stock price*
g = *the expected infinite annual growth rate of dividends*

The constant-growth DCF model shown in Equation 1 assumes that a company has a constant payout ratio and that its earnings are expected to grow at a constant rate. Thus, if a stock has a market price of $10 per share, an expected annual dividend of $1 per share, and if its dividends were expected to grow 3 percent per year, then the cost of equity for the company would be 13.0 percent (the 10 percent dividend yield plus the growth rate of 3 percent per year).

Q. How did you calculate the dividend yield component (D_1/P_0) of the constant-growth DCF formula?

A. I calculated the yield component of the DCF formula by multiplying the most recent annualized dividend by one plus the growth factor (discussed below), then dividing that product by the spot stock price after the close of the market on February 15, 2002, as reported by *Yahoo Finance.*

I used the spot stock price because it reflects all publicly available information. According to the efficient markets hypothesis, the current stock price includes investors' expectations of future returns and is the best indicator of these expectations.

Q. How did you estimate the dividend growth (g) component of the DCF model?

A. Since the DCF model is predicated on dividend growth, I examined historical and projected growth in dividends per share ("DPS"). I also examined growth in earnings per share ("EPS") and intrinsic growth.

Q. How did you calculate DPS growth?

A. I calculated five-year historical DPS growth by conducting a log-linear regression analysis of the dividends per share of the sample water companies for the period 1996 to 2000. The results of the regression analyses are shown in Schedule JMR-2. Staff's analysis indicates an average five-year DPS growth rate of 4.0 percent for the sample water companies.

Q. What DPS growth rate does *Value Line* project for the sample water companies?

A. *Value Line* projects an average DPS growth rate of 3.3 percent through 2004 – 2006 for the sample water companies it follows, as shown in Schedule JMR-2. This average rate is lower than the five-year average historical rate that I calculated.

Q. Why did you examine EPS growth to estimate the dividend growth component of the constant-growth DCF model?

A. I examined EPS growth because dividend growth does not occur independently of earnings. It would be virtually impossible for dividend growth to exceed earnings growth over the long run, as it would ultimately lead to payout ratios in excess of 100 percent,

which simply are not sustainable. Therefore, I considered historical growth in EPS in estimating dividend growth.

Q. What is Staff's five-year historical EPS growth rate?

A. Schedule JMR-2 shows the average rate of growth in EPS for the sample water companies. Staff's average five-year historical EPS growth rate is 4.0 percent for the sample water companies.

Q. What EPS growth rate did *Value Line* project for the sample water companies it follows?

A. Schedule JMR-2 shows the average of the projected EPS growth rates to be 7.6 percent, higher than the five-year historical EPS growth rate.

Q. What is retention growth?

A. Retention growth is simply the product of the percentage of earnings retained by the company ("retention ratio") and the book return on equity. This concept is based upon the theory that dividend growth can only be achieved if a company retains and reinvests a portion of its earnings in itself to earn a return.

Q. What is the formula for the retention growth rate?

A. The retention growth rate formula is:

Equation 2:

$$g = br$$

where: g = *retention growth*
b = *the retention ratio (1 – dividend payout ratio)*
r = *the return on common equity*

Q. What retention (br) growth rate did you calculate for your sample water companies?

A. I calculated an average retention (br) growth rate of 3.8 percent for my sample water companies, as shown on Schedule JMR-3. I calculated the rate by multiplying the accounting return on equity (r) by the retention ratio (b) over the period 1996 to 2000 and then averaging the results.

Q. Under what circumstances is the br growth rate method a reasonable estimate of future dividend growth?

A. The br growth rate is a reasonable estimate of future dividend growth if the retention ratio is fairly constant and if the market price to book value ("market-to-book") ratio is expected to equal 1.0. The retention ratio for the sample water companies used in Staff's analysis has remained relatively stable over the past several years. However, the average market-to-book ratio of the sample water companies is 2.2. (See Schedule JMR-5). I assume that investors expect the market-to-book ratio to remain above 1.0.

Q. What is the financial implication of a market-to-book ratio greater than 1.0?

A. The implication is that investors expect the sample water companies to earn book returns on equity greater than their costs of equity.

Q. How has Staff accounted for the assumption that the average market-to-book ratio of the sample water companies will remain above 1.0?

A. I accounted for the assumption that the average market-to-book ratio of the sample water companies will remain above 1.0 by adding a second growth term to my br growth rate to arrive at the intrinsic growth rate. This second growth term, derived by Myron Gordon in his book, *The Cost of Capital to a Public Utility*[3], is found by multiplying a variable, v by another variable, s. I will refer to the product of v and s as the vs, or stock financing

[3] Gordon, Myron J. *The Cost of Capital to a Public Utility*. MSU Public Utilities Studies, Michigan, 1974.

growth term. The vs growth term represents the company's dividend growth through the sale of stock.

Q. What does the variable v represent and how is it calculated?

A. The variable v represents the fraction of the funds raised from common stock sales that accrues to existing shareholders. It is calculated as follows:

Equation 3:

$$v = 1 - \left(\frac{book\ value}{market\ value} \right)$$

For example, if a share of stock with a $10 book value is selling for $13, the v term would equal .23 (1-[$10/$13]). Schedule JMR-3 shows Staff's calculation of v for each of the sample water companies.

Q. What does the variable s represent and how is it calculated?

A. The variable s represents the expected rate of increase in common equity from stock sales. For example, if a company has $100 in equity and it sells $10 of stock then s would equal 10 percent ($10/$100). Schedule JMR-6 shows the average rate of increase in common equity from stock sales for the sample water companies from 1995 to 2000. The average s value for the sample companies from 1995 to 2000 is 3.4 percent.

Q. How does the vs term work?

A. When a utility is expected to earn a book return equal to its cost of equity then its market price will equal its book value and v will be equal to 0.0 (1-($10/$10)). If a utility is expected to earn more than its cost of equity then its market-to-book ratio will be greater than 1.0. If the market-to-book ratio is greater than 1.0, and v is positive when new shares are sold, then the book value per share of outstanding stock is less than the per share contributions of new shareholders. The per share contribution in excess of book value per

share accrues to the old shareholders in the form of a higher book value. The resulting higher book value leads to higher expected earnings and dividends. Thus, the growth term in the basic DCF model should include the vs growth term when the market-to-book ratio is not expected to equal 1.0.

Q. Shouldn't utilities' market-to-book ratios fall to 1.0 if their authorized ROEs are set equal to their costs of equity?

A. Yes. Utilities' market-to-book ratios should fall to 1.0, in theory, making the vs term unnecessary. Setting the authorized return on equity for a utility equal to its cost of equity should eventually force the utility's market price down to equal its book value. In principle, then, the vs term is unnecessary in the long run. In reality, rate orders do not force market-to-book ratios to 1.0 for a variety of reasons. For example, regulatory commissions do not issue orders simultaneously for multijurisdictional utilities. Therefore, I included the vs growth term in my DCF analysis, even though the resulting growth rate estimate might be too high. My resulting estimates are too high to the extent that investors expect my sample's average market-to-book ratio to fall to 1.0 because of falling authorized ROEs.

Q. What is Staff's intrinsic growth rate and how did you calculate it?

A. Staff's intrinsic growth rate is 5.6 percent for the sample water companies. I calculated it by averaging the sum of my br and vs growth rates for the sample water companies. (See Schedule JMR-3.)

Q. Did you consider *Value Line* forecasts to estimate intrinsic growth?

A. Yes. I considered *Value Line*'s b and r projections to calculate projected intrinsic growth rates for the sample water companies. The average intrinsic growth rate calculated under this approach is 8.6 percent. Schedule JMR-3 shows Staff's calculations of intrinsic growth based on *Value Line*'s projections.

Q. What is Staff's expected infinite annual growth rate in dividends?

A. Schedule JMR-4 shows Staff's calculation of expected dividend growth. Staff's expected annual dividend growth rate is also shown in the following table:

Table 3

Growth Rate	g
5-Year EPS Growth	4.0%
Projected EPS Growth	7.6%
5-Year DPS Growth	4.0%
Projected DPS Growth	3.3%
5-Year Intrinsic Growth	5.6%
Projected Intrinsic Growth	8.6%
Average	**5.5%**

Q. What is the result of Staff's constant-growth DCF analysis?

A. Schedule JMR-8 shows the result of Staff's constant-growth DCF analysis. Staff's constant-growth DCF cost of equity estimate is also shown below:

Table 4

D_1/P_0	+	g	=	k
3.2%	+	5.5%	=	**8.7%**

The Multi-Stage DCF

Q. What is the multi-stage DCF formula?

A. The multi-stage DCF formula is shown in the following equation:

Equation 4:

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where: P_0 = *current stock price*
D_t = *dividends expected during stage 1*
K = *cost of equity*
n = *years of non – constant growth*
D_n = *dividend expected in year n*
g_n = *constant rate of growth expected after year n*

The multi-stage DCF (also known as non-constant or complex) model shown above incorporates at least two growth rates. It assumes that investors expect a certain rate of non-constant dividend growth in the near term known as "stage-1 growth", as well as a longer-term constant rate of growth thereafter known as "stage-2 growth."

Q. How did Staff implement the multi-stage DCF model?

A. I forecasted a stream of dividends and found the cost of equity that equates the present value of the stream to the current stock price for each of the companies followed by *Value Line*, consistent with Equation 4.

Q. What values did Staff use for the stage-1 and stage-2 growth rates?

A. For stage-1 growth, I forecasted dividends through 2005 for each of the sample water companies using *Value Line*'s intermediate-term forecast of dividends.[4] For stage-2 growth, or constant growth, I used the rate of growth in gross domestic product ("GDP") from 1929 to 2000, which is 6.6 percent. Historical growth in GDP is appropriate because it assumes that the water utility industry will neither grow faster, nor slower, than the overall economy.

Q. What are the results of Staff's multi-stage DCF analysis?

A. Schedule JMR-7 shows the results of Staff's multi-stage DCF analysis. The average of Staff's multi-stage DCF estimates is 9.4 percent.

Capital Asset Pricing Model

Q. Please describe the capital asset pricing model.

A. The CAPM is the best-known model of risk and return.[5] The CAPM is the work of Nobel prize-winning economists and provides a method to estimate the expected return on a risky asset. The model concludes that the expected return on a risky asset is equal to the sum of the prevailing risk-free interest rate and the market risk premium adjusted for the riskiness of the investment relative to the market. The critical assumptions of the CAPM

[4] *Value Line* projects annual dividends for 2001, 2002, and 2004-2006. The 2004-2006 figure is the expected dividend in 2005. Expected dividends in 2003 and 2004 are calculated using linear interpolation.
[5] Brealey, Richard, Stewart C. Myers. *Principles of Corporate Finance*. 1988. McGraw-Hill. New York. p. 165.

can be summed up in the following quote from the book, *The Stock Market: Theories and Evidence*:[6]

> The [CAPM] model presents a simple and intuitively appealing picture of financial markets. All investors hold efficient portfolios and all such portfolios move in perfect lockstep with the market. Portfolios differ only in their sensitivity to the market. Prices of all risky assets adjust so that their returns are appropriate, in terms of the model, to their riskiness. This riskiness is measured by a simple statistic, beta, which indicates the sensitivity of the asset to market movements.

Q. What is the CAPM formula?

A. The CAPM formula is shown in the following equation:

Equation 5:

$$K = R_f + \beta (R_m - R_f)$$

where:

R_f = *risk free rate*
R_m = *return on market*
β = *beta*
$R_m - R_f$ = *market risk premium*

Q. How did Staff implement the CAPM to estimate New River's cost of equity?

A. I implemented the CAPM on the same sample water companies to which I applied the DCF model.

Q. What risk-free rate of interest did Staff use?

A. I estimated the risk-free rate to be 4.6 percent. Staff's estimate is based upon an average of intermediate-term U.S. Treasury securities' spot rates published in *The Wall Street Journal*. Published rates, as determined by the capital markets, are objective, verifiable,

[6] Lorie, James, Mary T. Hamilton. *The Stock Market: Theories and Evidence*. Richard D. Irwin, Inc. Homewood, Illinois. 1973. p. 202.

and readily available, as opposed to rates published by a forecasting service which are not necessarily objective, and are certainly not necessarily verifiable or readily available. I averaged the yields-to-maturity of three intermediate-term (five-, seven-, and ten-year) U.S. Treasury securities quoted in the February 15, 2002, edition of *The Wall Street Journal*. Intermediate term rates averaged 4.6 percent.[7]

Q. What beta (β) did Staff use?

A. I used the average of the *Value Line* betas for the eight sample water companies in Staff's analysis as a proxy for New River's beta. Column 'F' of Schedule JMR-5 shows that the average *Value Line* beta is .51 for the sample water companies.

Q. Please describe the expected market risk premium ($R_m - R_f$).

A. The expected market risk premium is the amount of additional return that investors expect from investing in the market (or an average-risk security) over the risk-free asset.

Q. What is Staff's range of market risk premium estimates?

A. My range of estimates for the market risk premium is 8.2 percent to 9.8 percent.

Q. How did Staff calculate your market risk premium range?

A. I used two approaches. The first approach is an estimate of the historical market risk premium. The second approach is an estimate of the current market risk premium.

Q. Please describe Staff's first approach to estimating the market risk premium: estimating the historical market risk premium.

[7] Average yield on 5-, 7-, and 10-year Treasury notes according to the February 15, 2002, edition of *The Wall Street Journal*: 4.30%, 4.71%, and 4.85%, respectively.

A. For Staff's first approach, I assumed that the average historical market risk premium is a reasonable estimate of the expected market risk premium. If one consistently uses the long-run average market risk premium to estimate the expected market risk premium, one should, on average, be correct.

I used the historical intermediate-term market risk premium published in Ibbotson Associates' *Stocks, Bonds, Bills and Inflation 2001 Yearbook* for the 75-year period from 1926 to 2000. Ibbotson Associates' calculation is the arithmetic average difference between S&P 500 returns and intermediate-term government bond income returns. The 75-year period is used to eliminate shorter-term biases while at the same time including unexpected past events including business cycles. Staff's market risk premium estimate using this approach is 8.2 percent.

Q. Please describe Staff's second approach to estimating the market risk premium: estimating the current market risk premium.

A. My second approach essentially boils down to inserting a DCF-derived ROE into the CAPM equation, along with a beta and long-term risk-free rate, and solving the CAPM equation for the implied market risk premium. *Value Line* projects the expected dividend yield (next 12 months) and growth for all dividend-paying stocks under its review. According to the January 11, 2002, edition of *Value Line*, the expected dividend yield is 1.8 percent and the expected annual growth in share price is 13.3 percent.[8] Therefore, the constant-growth DCF estimate of the cost of equity to all dividend-paying stocks followed by *Value Line* is 15.1 percent. Using a beta of 1.00 and the current long-term risk-free rate of 5.37 percent, the implied current market risk premium is 9.8 percent.[9]

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[8] 3 to 5 year price appreciation potential is 65%. $1.65^{1/4} - 1 = 13.34\%$

[9] 15.14%=5.37%+1.00x(current market risk premium); 9.77%=current market risk premium.
A long-term rate is used here because the constant-growth DCF model does not assume a holding period other than infinity, which is a very long time. Therefore, a long-term risk-free rate is used for consistency.

Q. What are the results of Staff's CAPM analysis?

A. Schedule JMR-8 shows the results of Staff's CAPM analysis. Staff's CAPM cost of equity estimates are also shown in the following table:

Table 5

CAPM	Resulting Cost of Equity Estimate
Historical market risk premium	8.8%
Current market risk premium	9.6%
Average	**9.2%**

IV. FINAL COST OF EQUITY ESTIMATES FOR NEW RIVER

Q. Please summarize the results of Staff's cost of equity analyses.

A. The following table shows the consolidated results of Staff's cost of equity analysis:

Table 6

Constant-growth DCF	8.7%
Multi-stage DCF	9.4%
CAPM	9.2%
Average[10]	**9.1%**

Based on the results of Staff's cost of equity analysis shown in Table 7, I would conclude that the cost of equity to the water utility industry is between 8.7 percent and 9.4 percent.

Q. What is Staff's ROE recommendation for New River?

[10] Some figures may appear to be rounding errors due the number of decimal places calculated by Microsoft Excel.

A. Staff's ROE recommendation for New River is 8.7 percent. This is consistent with the lower end of my range of cost of equity estimates. Staff is recommending a ROE at the lower end of my reasonable range because New River's capital structure reflects very little financial risk compared to the sample water companies. I have accounted for the business risks associated with the nature of water utility operations in my selection of proxy companies.

V. RATE OF RETURN RECOMMENDATION

Q. What is Staff's rate of return recommendation for New River?

A. Staff's ROR recommendation for New River is 8.7 percent, as shown in Schedule JMR-9 and the following table:

Table 8

	Weight	Cost	Weighted Cost
Long-term Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	8.7%	8.7%
Cost of Capital			**8.7%**

VI. THE COMPANY'S REQUESTED ROE

Q. What ROE is the Company requesting?

A. The Company requests a 12.5 percent ROE in this proceeding.

Q. Did the Company perform any analyses in support of its proposed ROE?

A. No. According to responses to Staff data requests, the Company determined that its requested ROE of 12.5 percent was reasonable based on conversations with Staff.

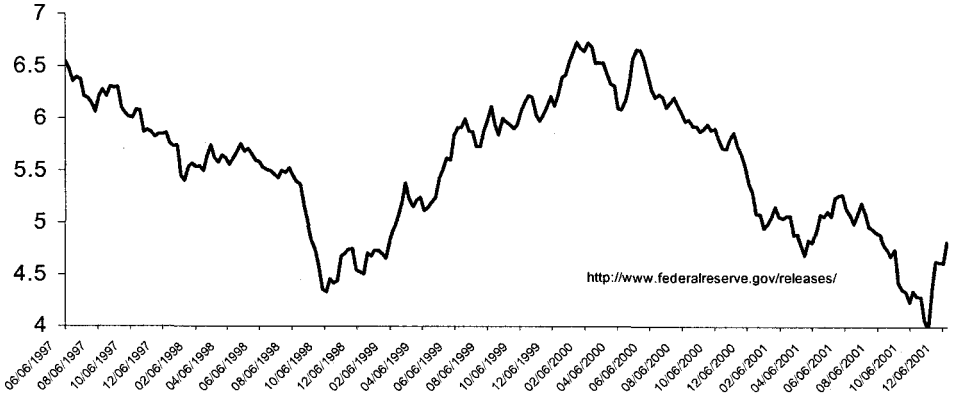
Q. Should the Commission rely on previous Commission authorized ROE's from other proceedings when determining New River's ROE?

A. No. The Commission should not rely on previous Commission authorized ROE's to set New River's ROE. Only the most recent cost of equity is relevant at any given time. Staff's recommendation is consistent with the efficient markets hypothesis, a crux of modern corporate finance theory. The capital markets determine the cost of capital and capital markets change over time.

Q. What has been the general trend of capital costs in the last few years?

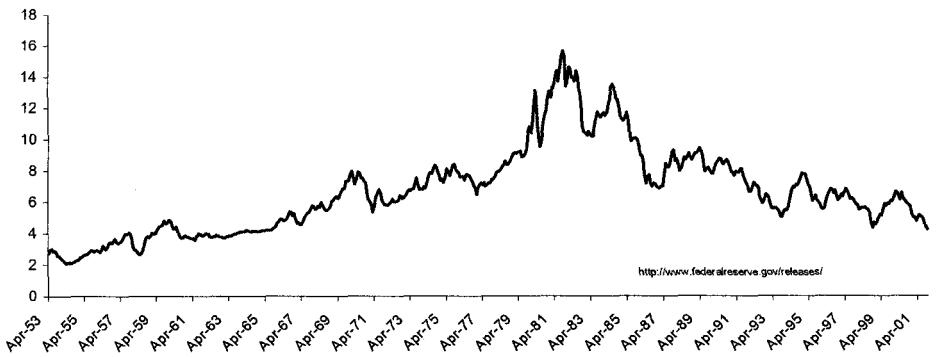
A. Interest rates have declined significantly in the last few years. Chart 1 graphs intermediate-term U.S. Treasury rates from June 1997 to February 2002.

Chart 1: Average Yield on 5-, 7-, & 10-Year Treasuries



The following graph puts interest rates and capital costs in general, into historical perspective. Interest rates have declined significantly in the past twenty years and are currently at their lowest level since the 1960's.

Chart 2: History of 5- and 10-Year Treasury Yields



According to the CAPM, the cost of equity moves in the same direction as interest rates. Chart 2 reinforces the results of my CAPM analysis, which found the cost of equity to the water utility industry to be significantly lower than what we have seen in recent decades.

Q. Does this conclude your direct testimony?

A. Yes, it does.

New River Utility Company
Capital Structures of Sample Water Companies
At September 30, 2001

Line No.	[A] Company	[B] Ticker Symbol	[C] Long-Term Debt	[D] Preferred Stock	[E] Common Equity	[F] Total
1	American States Water	AWR	49.2%	0.5%	50.3%	100%
2	American Water Works	AWK	57.0%	1.2%	41.8%	100%
3	California Water Service	CWT	50.6%	0.8%	48.6%	100%
4	Connecticut Water Service	CTWS	48.0%	0.6%	51.4%	100%
5	Middlesex Water	MSEX	51.9%	2.6%	45.5%	100%
6	Philadelphia Suburban	PSC	53.0%	0.2%	46.9%	100%
7	SJW Corp.	SJW	42.4%	0.0%	57.6%	100%
8	Southwest Water	SWWC	46.8%	0.5%	52.7%	100%
9	Average		49.8%	0.8%	49.4%	100%
10	Litchfield Park		0.0%	0.0%	100.0%	100%
11						
12						
13						
14						
15						
16						
17	Source: U.S. Securities and Exchange Commission					

Schedule JMR-1

New River Utility Company
Growth in Earnings and Dividends
Sample Water Companies

Line No.	[A] Company	[B] '96-'00 Earnings (EPS)	[C] Value Line '98-'00 to '04-'06 Projected Earnings (EPS)	[D] '96-'00 Dividends (DPS)	[E] Value Line '98-'00 to '04-'06 Projected Dividends (DPS)
1	American States Water	4.0%	7.0%	1.2%	2.0%
2	American Water Works	4.8%	10.0%	6.5%	4.5%
3	California Water Service	-4.5%	6.0%	1.3%	1.5%
4	Connecticut Water Service	2.7%	----	1.0%	----
5	Middlesex Water	-2.3%	----	2.6%	----
6	Philadelphia Suburban	11.6%	7.5%	5.6%	5.0%
7	SJW Corp.	-8.7%	----	2.6%	----
8	Southwest Water	24.4%	----	11.1%	----
9					
10	Maximum	24.4%	10.0%	11.1%	5.0%
11	Minimum	-8.7%	6.0%	1.0%	1.5%
12	Average	4.0%	7.6%	4.0%	3.3%
13					
14					
15					
16	Source: *Value Line*				

Schedule JMR-2

New River Utility Company
Calculation of Intrinsic Growth
Sample Water Companies

Line No.	[A] Company	[B] Retention Growth br '96-'00	[C] *Value Line* Projected br '04-'06	[D] Book Value (BV)	[E] Market Price (MP)	[F] v 1-[(BV)/(MP)]	[G] s	[H] Stock Financing Growth vs	[I] '96-'00 Intrinsic Growth br + vs	[J] '04-'06 *Value Line* Projected br + vs
1	American States Water	2.4%	5.5%	19.9	33.8	0.41	3.4%	1.4%	3.8%	6.9%
2	American Water Works	4.6%	7.0%	17.5	43.1	0.59	6.5%	3.8%	8.4%	10.8%
3	California Water Service	3.6%	5.5%	13.1	24.6	0.47	0.3%	0.1%	3.7%	5.6%
4	Connecticut Water Servic	2.9%	--------	9.3	28.5	0.67	1.5%	1.0%	3.9%	--------
5	Middlesex Water	1.4%	--------	14.2	22.8	0.38	6.6%	2.5%	3.9%	--------
6	Philadelphia Suburban	4.0%	5.5%	8.4	23.3	0.64	8.8%	5.6%	9.6%	11.1%
7	SJW Corp.	5.7%	--------	49.2	79.8	0.38	0.0%	0.0%	5.7%	--------
8	Southwest Water	5.6%	--------	5.8	14.0	0.58	0.0%	0.0%	5.6%	--------
9										
10	Maximum								9.6%	11.1%
11	Minimum								3.7%	5.6%
12	Average	3.8%							5.6%	8.6%
13										
14										
15										
16										
17										
18										
19										

20 Book value = average number of shares outstanding divided by common equity as reported 3rd Qtr 2001 10-Q's filed with the SEC.
21 Market Price = Market price after the close of the market as reported by *Yahoo Finance*, February 15, 2002
22 [G] Per Schedule JMR-6

Schedule JMR-3

New River Utility Company
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Companies

Line No.	[A]	[B]
		g
1	5-Year EPS Growth	4.0%
2	Projected EPS Growth	7.6%
3	5-Year DPS Growth	4.0%
4	Projected DPS Growth	3.3%
5	5-Year Intrinsic Growth	5.6%
6	Projected Intrinsic Growth	8.6%
7		
8	Average	5.5%
9		
10		
11		
12	Per Schedule JMR-2 and Schedule JMR-3	

Schedule JMR-4

New River Utility Company
Selected Financial Data of Sample Water Companies

Line No.	[A] Company	[B] Symbol	[C] Current Mkt Price	[D] Book Value	[E] Mkt To Book	[F] *Value Line* Beta	[G] Market Cap (mil)
1	American States Water	AWR	33.8	19.9	1.7	0.60	341
2	American Water Works	AWK	43.1	17.5	2.5	0.50	4313
3	California Water Service	CWT	24.6	13.1	1.9	0.60	376
4	Connecticut Water Service	CTWS	28.5	9.3	3.1	0.40	216
5	Middlesex Water	MSEX	22.8	14.2	1.6	0.45	174
6	Philadelphia Suburban	PSC	23.3	8.4	2.8	0.60	1572
7	SJW Corp.	SJW	79.8	49.2	1.6	0.50	243
8	Southwest Water	SWWC	14.0	5.8	2.4	0.45	128
9	Maximum				3.1	0.60	
10	Minimum				1.6	0.40	
11	Average				2.2	0.51	

Current price = Market price after the close of the market as reported by *Yahoo Finance*, February 15, 2002

Book value = average number of shares outstanding divided by common equity as reported 3rd Qtr 2001 10-Q's filed with the SEC.

Market Cap according to *Yahoo Finance*

Schedule JMR-5

New River Utility Company
Calculation of s Value for Sample Water Companies

Line No.	[A] Company	[B] 2000	[C] 1999	[D] 1998	[E] 1997	[F] 1996	[G] 1995	[H] 1994	[I] s value
1	**American States Water**								
2	common equity		158,846	154,299	151,053	146,766	121,576	118,962	
3	funds from issuing common stock	2,805	-	-	1,472	21,494	-	-	
4	s value	1.8%	0.0%	0.0%	1.0%	17.7%	0.0%		3.4%
5	**American Water Works**								
6	common equity		1,634,798	1,481,611	1,142,416	1,057,874	818,939	733,440	
7	funds from issuing common stock	33,304	41,913	36,227	28,041	189,999	36,383	37,347	
8	s value	2.0%	2.8%	3.2%	2.7%	23.2%	5.0%		6.5%
9	**California Water Service**								
10	common equity		177,182	171,697	164,065	154,226	146,949	144,447	
11	funds from issuing common stock	644	46	-	-	1,434	707	17,741	
12	s value	0.4%	0.0%	0.0%	0.0%	1.0%	0.5%		0.3%
13	**Connecticut Water Service**								
14	common equity		62,495	60,326	56,069	54,395	51,788	47,983	
15	funds from issuing common stock	227	251	280	256	1,136	2,410	1,908	
16	s value	0.4%	0.4%	0.5%	0.5%	2.2%	5.0%		1.5%
17	**Middlesex Water**								
18	common equity		70,489,356	66,729,466	51,225,549	49,215,813	47,643,661	44,851,095	
19	funds from issuing common stock	1,244,972	1,104,469	14,288,456	1,147,418	1,168,122	1,669,171	928,459	
20	s value	1.8%	1.7%	27.9%	2.3%	2.5%	3.7%		6.6%
21	**Philadelphia Suburban**								
22	common equity		367,714	349,868	191,525	176,795	156,976	143,795	
23	funds from issuing common stock	37,190	7,061	32,589	14,258	14,651	9,060	6,916	
24	s value	10.1%	2.0%	17.0%	8.1%	9.3%	6.3%		8.8%
25	**SJW Corp.**								
26	common equity		143,894	143,149	133,553	120,028	108,854	104,098	
27	funds from issuing common stock	-	-	-	-	-	-	-	
28	s value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
29	**Southwest Water**								
30	common equity		39,960	34,626	31,910	29,883	28,727	28,002	
31	funds from issuing common stock	-	-	-	-	-	-		
32	s value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
33									
34	Average								3.4%
35									
36									
37	Source: Annual Reports to Shareholders and 10-K's filed with the SEC.								
38	http://www.freeedgar.com/								

Schedule JMR-6

New River Utility Company
Multi-Stage DCF Estimates
Sample Water Companies

Line No.	[A]	[B] Current Mkt. Price (P_0)	[C] Projected Dividends[1] (stage 1 growth) (D_t) 2001	[D] 2002	[E] 2003	[F] 2004	[G] 2005	[H] Stage 2 growth[2] (g_n)	[I] Equity Cost Estimate (K)
1									
2									
3	American States Water	33.8	1.30	1.32	1.35	1.37	1.42	6.6%	9.9%
4	American Water Works	43.1	0.94	0.98	1.01	1.05	1.11	6.6%	8.6%
5	California Water Service	24.6	1.12	1.14	1.16	1.17	1.20	6.6%	10.5%
6	Connecticut Water Service	28.5	-----	-----	-----	-----	-----	6.6%	-----
7	Middlesex Water	22.8	-----	-----	-----	-----	-----	6.6%	-----
8	Philadelphia Suburban	23.3	0.50	0.53	0.55	0.57	0.60	6.6%	8.6%
9	SJW Corp.	79.8	-----	-----	-----	-----	-----	6.6%	-----
10	Southwest Water	14.0	-----	-----	-----	-----	-----	6.6%	-----
11									
12								Average	9.4%

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : P_0 = *current stock price*
D_t = *dividends expected during stage 1*
K = *cost of equity*
n = *years of non – constant growth*
D_n = *dividend expected in year n*
g_n = *constant rate of growth expected after year n*

[1]Projected data not available for companies followed by *The Value Line Expanded Edition*.

[2]Average annual growth in GDP 1929 - 2000 in current dollars. http://www.bea.doc.gov/bea/dn/nipaweb/TableViewFixed.asp#Mid

New River Utility Company
Results of Cost of Equity Analysis
Sample Water Companies

Line No.	[A] Constant Growth DCF	[B]		[C]		[D]		[E]
				D_1/P_0	+	g	=	k
1	Constant Growth DCF Estimate			3.2%	+	5.5%	=	8.7%
2								
3								
4	**CAPM Method**	**Rf**	+	**β**	**x**	**(Rp)**	=	**k**
5	Historical Market Risk Premium	4.6%	+	0.51	x	8.2%	=	8.8%
6	Current Market Risk Premium	4.6%	+	0.51	x	9.8%	=	9.6%
7								
8								
9								
10						Constant-growth DCF estimate	=	8.7%
11						Mulit-stage DCF estimate	=	9.4%
12						CAPM estimate	=	9.2%
13						Average	=	9.1%

Schedule JMR-8

New River Utility Company
Capital Structure
And Weighted Cost of Capital

Line No.	[A]	[B] Amount	[C] Weight (%)	[D] Cost	[E] Weighted Cost
1	Long-term Debt	$ -	-	-	-
2	Common Equity	$ 570,180	100.0%	8.7%	8.7%
3		$ 570,180	100.0%		8.7%

Schedule JMR-9

SCOTT, JR.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JIM IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF THE APPLICATION OF NEW RIVER UTILITY COMPANY FOR A RATE INCREASE	))))	DOCKET NO. W-01737A-01-0662

DIRECT TESTIMONY

OF

MARLIN SCOTT, JR.

UTILITIES ENGINEER

UTILITIES DIVISION

MARCH 28, 2002

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EXHIBIT

SUMMARY OF TESTIMONY
OF MARLIN SCOTT, JR.
FOR
NEW RIVER UTILITY COMPANY
DOCKET NO. W-01737A-01-0662

I will appear on behalf of the Utilities Division Staff and will testify concerning Staff's position and recommendation regarding New River Utility Company's ("Company") application for permanent rate increase in the area of the engineering evaluation. Summaries of my findings and recommendations are:

1. Maricopa County Environmental Services Department ("MCESD") Compliance Status – The MCESD has stated the Company's water system has minor deficiencies and the MCESD cannot determine if this system is currently delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards. Therefore, Staff recommends that before any new rate increase goes into effect for this proceeding, the Company should submit to the Director of the Utilities Division MCESD documentation stating that its water system is delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards.

2. Water Testing Cost – Staff recommends its estimated annual water testing cost of $9,138 be adopted.

3. Arizona Department of Water Resources ("ADWR") Compliance – The Company's water system is in compliance with ADWR regulations.

4. Service Line and Meter Installation Charges – The Company does not wish to change its charges and Staff finds these existing charges to be reasonable.

5. Water Depreciation Rates - Staff recommends adoption of its own water depreciation rates.

6. Curtailment Plan Tariff – Staff recommends the Company file a Curtailment Plan Tariff within 90 days after the effective date of any decision and order pursuant to this proceeding. This tariff shall be submitted to the Director of the Utilities Division for review and approval.

INTRODUCTION

Q. Please state your name and business address.

A. My name is Marlin Scott, Jr. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom and in what position are you employed?

A. I am employed by the Arizona Corporation Commission ("Commission") as a Utilities Engineer - Water/Wastewater for the Utilities Division.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since November 1987.

Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?

A. Among other responsibilities, I inspect, investigate and evaluate water and wastewater systems; obtain data, prepare reconstruction cost new and/or original cost studies, prepare cost of service studies and investigative reports; interpret rules and regulations; suggest corrective action and provide technical recommendations on water and wastewater system deficiencies; and provide written and oral testimony on rates and other cases before the Commission.

Q. How many companies have you analyzed for the Utilities Division?

A. I have analyzed approximately 322 companies in various capacities for the Utilities Division.

Q. Have you previously testified before this Commission?

A. Yes, I have testified in 33 proceedings before this Commission.

. . .

. . .

Q. What is your educational background?

A. I graduated from Northern Arizona University in 1984 with a Bachelor of Science degree in Civil Engineering Technology.

Q. Briefly describe your pertinent work experience.

A. Prior to my employment with the Commission, I was Assistant Engineer for the City of Winslow, Arizona, for about two years. Prior to that, I was a Civil Engineering Technician with the U. S. Public Health Service in Winslow for approximately six years.

Q. Please state your professional membership, registrations, and licenses.

A. I am a member of the National Association of Regulatory Utility Commissioners ("NARUC") Staff Subcommittee on Water.

PURPOSE OF TESTIMONY

Q. What was your assignment in this rate proceeding?

A. My assignment was to provide an engineering evaluation of New River Utility Company's ("Company") water operation.

Q. What is the purpose of your testimony in this proceeding?

A. To present the findings of my engineering evaluation of the Company's water operation. Those findings are contained in my Engineering Report that I have prepared for this proceeding and is included as Exhibit MSJ-1 in this pre-filed testimony.

ENGINEERING REPORT

Q. Would you briefly describe what was involved in preparing the Engineering Report in this rate proceeding?

A. After reviewing the Company's rate application, I physically inspected the water system to evaluate the operation and to determine which plant items were or were not used and

useful. I contacted the Maricopa County Environmental Services Department ("MCESD") to determine if the water system was in compliance with MCESD regulation. I obtained information from the Company regarding water testing, water usage, and analyzed that information. Based on this data, I made my evaluation and prepared my Engineering Report.

Q. Please briefly summarize the information contained in Staff's Engineering Report, Exhibit MSJ-1.

A. This Exhibit is the Engineering Report for the Company's water operation. I inspected the water system on November 28, 2001, with Charles Myhlhousen, Staff Analyst, accompanied by Mr. Bob Fletcher of the Company. The water operation consists of three wells having a total capacity of 2,650 gallons per minute and three storage tanks having a total capacity of 3,000,000 gallons serving approximately 1,397 customers during the Test Year.

There were minor deficiencies in the water operation and the MCESD cannot determine if this system is currently delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards. Therefore, Staff recommends that before any new rate increase goes into effect for this proceeding, the Company should submit to the Director of the Utilities Division MCESD documentation stating that its water system is delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards.

The Company reported its water testing cost and operator's expense at a combined cost of $25,756 during the Test Year. I estimated $9,138 for the average annual testing cost.

The Arizona Department of Water Resources indicated that the Company is within the Phoenix Active Management Area and is in compliance with its monitoring and reporting requirements.

The Company does not wish to change its service line and meter installation charges and Staff finds these existing charges to be reasonable. I recommended Staff's guidelines for water depreciation rates and recommended these rates be used for the annual accrual of depreciation expense on an account-by-account basis upon adoption by the Commission.

I also evaluated the system's well and storage capacities for system adequacy. Staff recommends the Company submit a Curtailment Plan Tariff for review and approval.

For more detailed information about my evaluation of the Company's water operation, please see Exhibit MSJ-1.

CONCLUSIONS AND RECOMMENDATIONS

Q. Based upon your investigation, what are Staff's conclusions and recommendations?

A. After my engineering evaluation of the Company's water operation, Staff concludes and recommends that: 1) the water system has minor deficiencies and the MCESD cannot determine if this system is currently delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards. For this reason, before any new rate increase goes into effect for this proceeding, the Company should submit to the Director of the Utilities Division MCESD documentation stating that its water system is delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards; 2) water testing cost of $9,138 be adopted; 3) the water system is in compliance with ADWR regulations; 4) the Company's existing service line and meter installation charges remain reasonable; 5)

Staff's water depreciation rates be adopted; and 6) the Company submit a Curtailment Plan Tariff for Staff review and approval.

Q. Does this conclude your direct testimony?

A. Yes it does.

EXHIBIT MSJ - 1

SUMMARY
OF
ENGINEERING REPORT
FOR
NEW RIVER UTILITY COMPANY
DOCKET NO. W-01737A-01-0662 (Rates)

Exhibit MSJ - 1 is an Engineering Report for New River Utility Company ("Company"). In this report, Staff Engineering finds and recommends:

1. The Maricopa County Environmental Services Department ("MCESD") has stated the Company's system has minor deficiencies in monitoring and reporting for, 1) nitrate, 2) improper sampling, 3) outdated monitoring and operational plans, 4) radiochemical, and 5) lead & copper. As a result, the MCESD cannot determine if the Company is delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards.

   Therefore, Staff Engineering recommends that before any new rate increase goes into effect for this proceeding, the Company should submit to the Director of the Utilities Division MCESD documentation stating that its water system is delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards. See Section F, MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT COMPLIANCE.

2. Using Staff's water testing cost of $9,138 per year as shown in Table I. See Section F, MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT COMPLIANCE.

3. That the Company is in compliance with Arizona Department of Water Resources. See Section G, ARIZONA DEPARTMENT OF WATER RESOURCES COMPLIANCE.

4. The Company does not wish to change its Service Line and Meter Installation Charges as shown in Table II and Staff finds these charges reasonable. See Section H, OTHERS.

5. Adopting Staff's recommended Depreciation Rates as shown in Table II. See Section H, OTHERS.

6. That the Company file a Curtailment Plan Tariff, as attached, for approval within 90 days after the effective date of any decision and order pursuant to this proceeding. See Section H, OTHERS.

MSJ:jbc

cc: Engineering File

ENGINEERING REPORT
FOR
NEW RIVER UTILITY COMPANY
DOCKET NO. W-01737A-01-0662 (RATES)

A. PURPOSE OF REPORT

This report was prepared in response to a rate application filed by New River Utility Company ("Company" or "New River"). This report will provide a description of the water utility system, evaluate its growth potential, provide information on its status with other regulatory agencies, and any other information, which would impact its ability to provide service to existing or future customers. Marlin Scott, Jr., Staff Utilities Engineer, and Charles Myhlhousen, Staff Auditor II, conducted a field inspection of the Company's water system on November 28, 2001, in the accompaniment of Bob Fletcher, Owner of the Company.

B. LOCATION OF COMPANY

The Company's water system is located in Peoria with a certificated area covering approximately 1.7 square miles. Figures 1 and 2 shows the location of the Company in relation to other Commission regulated companies in Maricopa County and in the immediate area.

C. DESCRIPTION OF SYSTEM

The current operating water system consists of three wells, three storage tanks and a distribution system serving 1,397 customers during the Test Year 2000. Descriptions of the plant facilities are as follows:

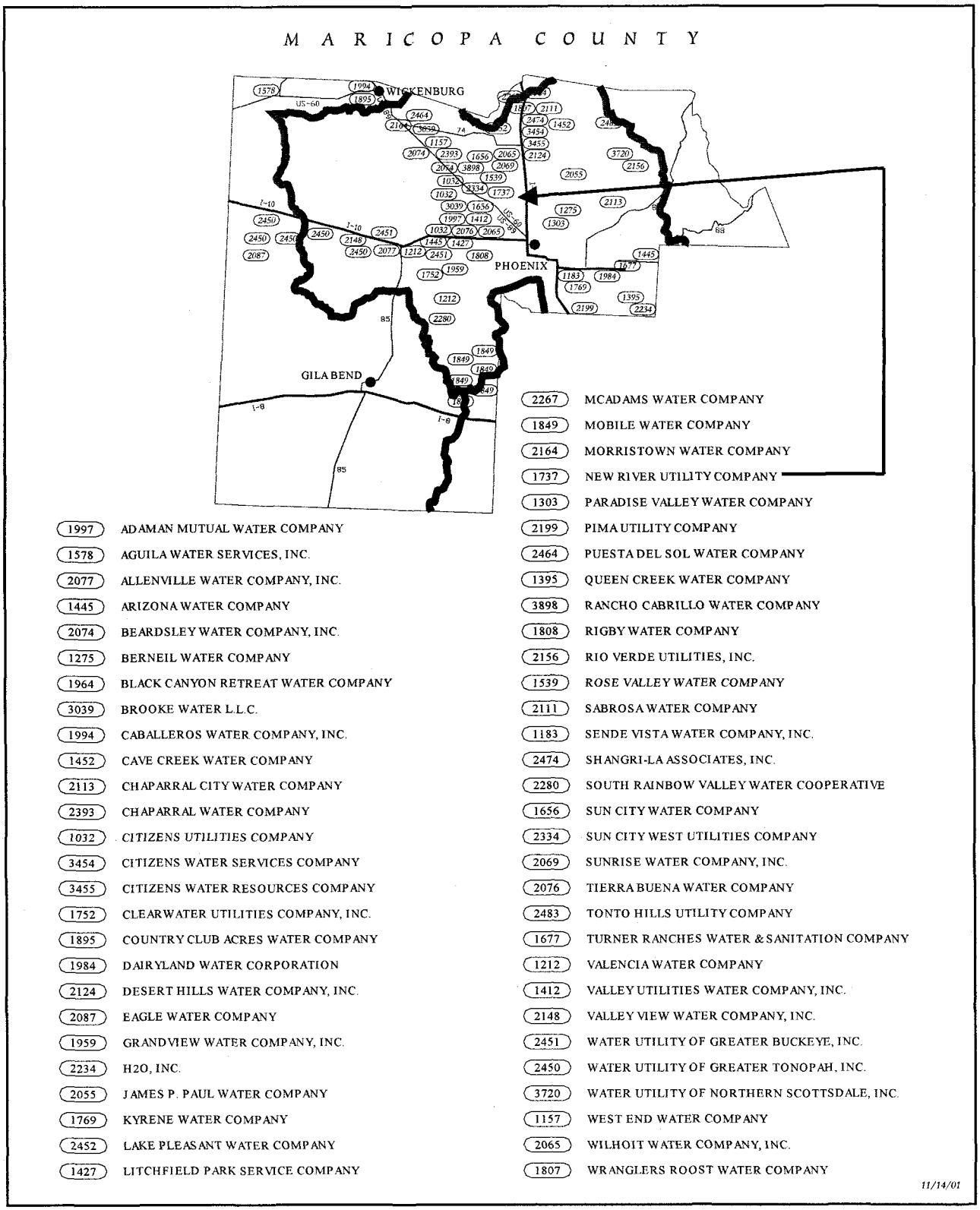
Well No. 4 & Tank #1

This site is just south of the office at 78th Avenue and Deer Valley Road. Well No. 4, which is not-in-service and not connected to the system, has a 6-inch casing and is 1,308 feet deep. This well is equipped with a 75-horsepower ("Hp") turbine pump having a flow rate of 700 gallons per minute ("GPM").

Water from Well Nos. 1 and 2 pump into Tank #1, a 1,000,000 gallon storage tank, through a gas chlorinator, a 14-inch meter, three 25-Hp and one 100-Hp booster pumps, and into a 5,000 gallon pressure tank before distribution into the system. Radio telemetry controls were installed in September 2001 at this Tank #1 for operations of Well Nos. 1 and 2.

Well Site No. 1

This well site is located northwest of the office along Deer Valley Road, near 78th Avenue. Well No. 1, having a 10-inch casing to a depth of 1,280 feet, is equipped with a 200-Hp



1997	ADAMAN MUTUAL WATER COMPANY
1578	AGUILA WATER SERVICES, INC.
2077	ALLENVILLE WATER COMPANY, INC.
1445	ARIZONA WATER COMPANY
2074	BEARDSLEY WATER COMPANY, INC.
1275	BERNEIL WATER COMPANY
1964	BLACK CANYON RETREAT WATER COMPANY
3039	BROOKE WATER L.L.C.
1994	CABALLEROS WATER COMPANY, INC.
1452	CAVE CREEK WATER COMPANY
2113	CHAPARRAL CITY WATER COMPANY
2393	CHAPARRAL WATER COMPANY
1032	CITIZENS UTILITIES COMPANY
3454	CITIZENS WATER SERVICES COMPANY
3455	CITIZENS WATER RESOURCES COMPANY
1752	CLEARWATER UTILITIES COMPANY, INC.
1895	COUNTRY CLUB ACRES WATER COMPANY
1984	DAIRYLAND WATER CORPORATION
2124	DESERT HILLS WATER COMPANY, INC.
2087	EAGLE WATER COMPANY
1959	GRANDVIEW WATER COMPANY, INC.
2234	H2O, INC.
2055	JAMES P. PAUL WATER COMPANY
1769	KYRENE WATER COMPANY
2452	LAKE PLEASANT WATER COMPANY
1427	LITCHFIELD PARK SERVICE COMPANY
2267	MCADAMS WATER COMPANY
1849	MOBILE WATER COMPANY
2164	MORRISTOWN WATER COMPANY
1737	NEW RIVER UTILITY COMPANY
1303	PARADISE VALLEY WATER COMPANY
2199	PIMA UTILITY COMPANY
2464	PUESTA DEL SOL WATER COMPANY
1395	QUEEN CREEK WATER COMPANY
3898	RANCHO CABRILLO WATER COMPANY
1808	RIGBY WATER COMPANY
2156	RIO VERDE UTILITIES, INC.
1539	ROSE VALLEY WATER COMPANY
2111	SABROSA WATER COMPANY
1183	SENDE VISTA WATER COMPANY, INC.
2474	SHANGRI-LA ASSOCIATES, INC.
2280	SOUTH RAINBOW VALLEY WATER COOPERATIVE
1656	SUN CITY WATER COMPANY
2334	SUN CITY WEST UTILITIES COMPANY
2069	SUNRISE WATER COMPANY, INC.
2076	TIERRA BUENA WATER COMPANY
2483	TONTO HILLS UTILITY COMPANY
1677	TURNER RANCHES WATER & SANITATION COMPANY
1212	VALENCIA WATER COMPANY
1412	VALLEY UTILITIES WATER COMPANY, INC.
2148	VALLEY VIEW WATER COMPANY, INC.
2451	WATER UTILITY OF GREATER BUCKEYE, INC.
2450	WATER UTILITY OF GREATER TONOPAH, INC.
3720	WATER UTILITY OF NORTHERN SCOTTSDALE, INC.
1157	WEST END WATER COMPANY
2065	WILHOIT WATER COMPANY, INC.
1807	WRANGLERS ROOST WATER COMPANY

11/14/01

Figure 1. County Map

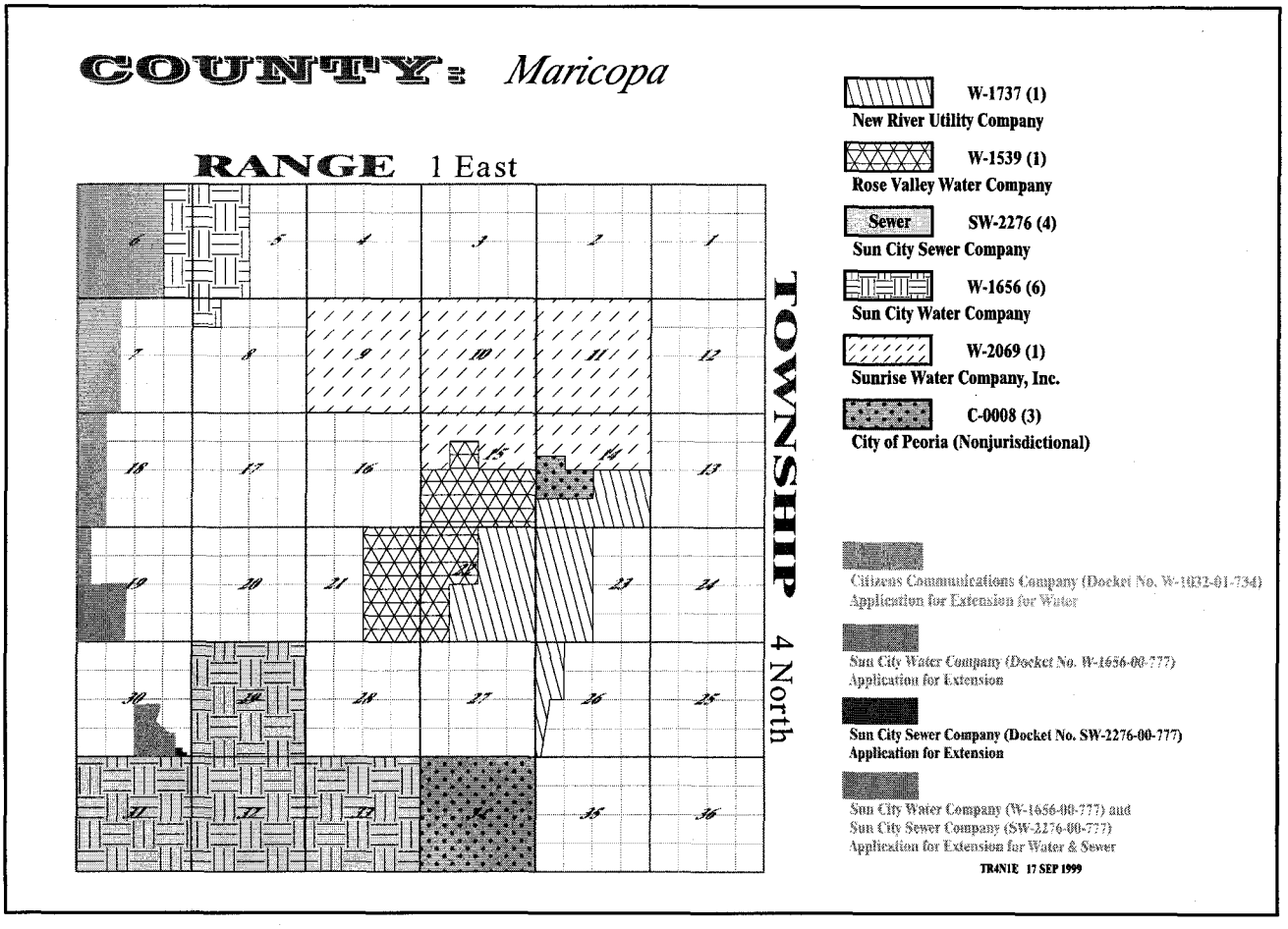


Figure 2. Certificated Area

turbine pump with a flow rate of 1,000 GPM through an 8-inch meter. Radio telemetry was installed in September 2001 to operate pumping to Tank #1.

Well Site No. 2

This well site is located north of Deer Valley Road and 75th Avenue. Well No. 2, having a 16-inch casing to a depth of 1,280 feet, is equipped with a 150-Hp turbine pump with a flow rate of 400 GPM through a 6-inch meter. Radio telemetry was installed in September 2001 to operate pumping to Tank #1.

Well No. 3 and Tanks #2 & #3

This site is located at Rose Garden Lane and 87th Avenue. Well No. 3, is not-in-service at this time and is being refurbished from an irrigation well to a domestic well. This well has a

16-inch casing to a depth of 1,650 feet and is equipped with a 300-Hp turbine pump capable of pumping 1,200 GPM and was scheduled to be placed into service in December 2001.

Well No. 6 pumps water into two 1,000,000 gallon storage tanks, through a gas chlorinator, three 25-Hp and one 100-Hp booster pumps, and into a 5,000 gallon pressure tank before distribution into the system. The two storage tanks and its pumping facilities were placed into service in 2000. Radio telemetry controls were installed in September 2001 at these two storage tanks for operation of Well No. 6.

Well Site No. 6

This site is located near Mary Ann Drive and 87th Avenue. Well No. 6 has a 16-inch casing to a depth of 1,650 feet and is equipped with a 300-Hp turbine pump having a flow rate of 1,250 GPM through a 10-inch meter. This well is also equipped with a gas chlorinator and this entire well site was placed into operation in 1999. Radio telemetry was installed in September 2001 to operate pumping to Tanks #2 and #3.

Distribution System

The distribution system consists of 300 feet of 2-inch polyvinyl-chloride ("PVC") pipe; 18,818 feet of 6-inch PVC; 40,587 feet of 8-inch PVC; 3,578 feet of 10-inch PVC; 2,579 feet of 21-inch PVC; 1,509 feet of 8-inch ductile iron pipe (DIP); 19,929 feet of 12-inch DIP; 62 feet of 16-inch DIP; and 2,000 feet of 10-inch transite pipe, for a total of 89,362 feet or 16.92 miles, with 154 fire hydrants serving 1,397 customers.

The customer meter count and size consists of 653 meters which are 3/4-inch, 714 meters which are 1-inch, 8 meters which are 1-1/2-inch, 18 meters which are 2-inch, 2 meters which are 4-inch compound, and 2 meters which are 6-inch compound; for a total of 1,397 meters.

D. WATER USE

Figure 3 details the Company's water use during the Test Year 2000. A high usage of 1,226 gallons per day ("GPD") per connection and a low of 369 GPD per connection were experienced, for an annual average usage of 743 GPD per connection.

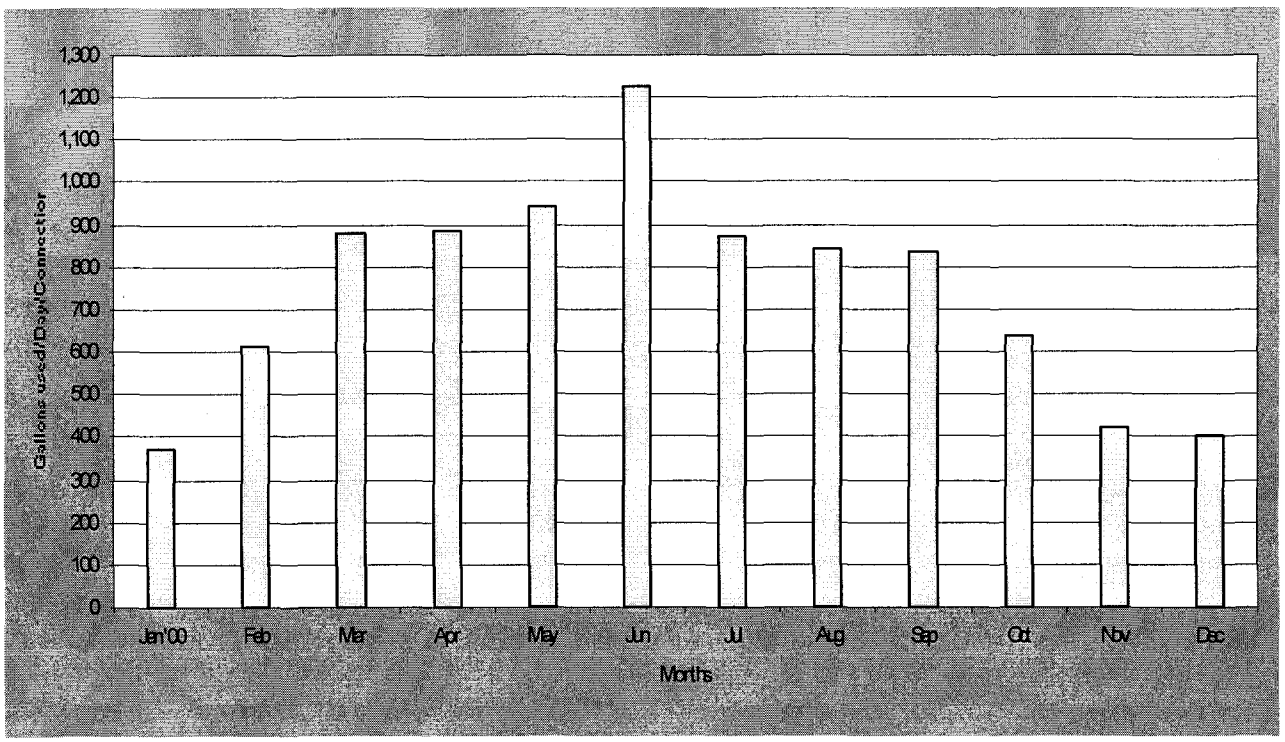


Figure 3. Water Use

The Company reported 369,204,000 gallons of water pumped, 310,142,000 gallons sold, and accounted-for 36,184,000 gallons of water used for flushing and disinfecting new plant facilities. This would result in a non-account water level of 6.2 percent, which Staff Engineering considers acceptable.

E. GROWTH PROJECTION

Figure 4 details the customer growth using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. During the Test Year 2000, the Company had 1,397 customers and it is projected that the Company could have approximately 4,050 customers by 2006.

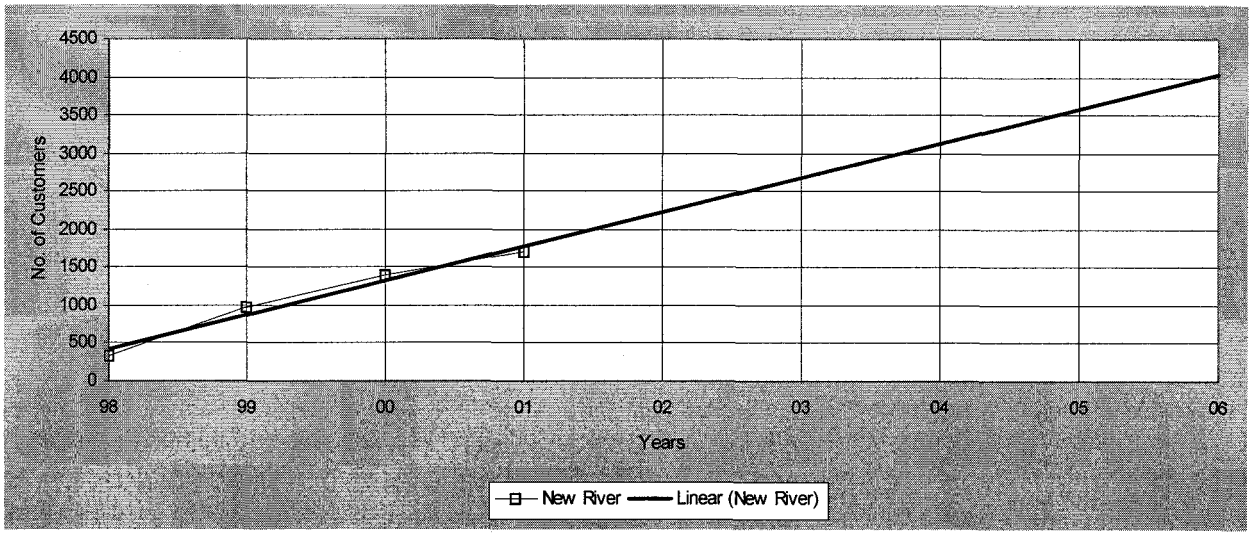


Figure 4. Growth Projection

F. MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT ("MCESD") COMPLIANCE

Compliance Status: As reported from MCESD on November 6, 2001, the Company's water system, PWS #07-051, has minor deficiencies in monitoring and reporting for, 1) missed monitoring for nitrate triggering exceedance, 2) improper sampling per point-of-entry, 3) outdated monitoring and operational plans, 4) missed radiochemical monitoring, and 5) improper lead & copper monitoring. As a result, the MCESD cannot determine if New River is delivering water that does not exceed any maximum contaminant levels ("MCLs") and meets the Safe Drinking Water Act quality standards.

Staff Engineering recommends that before any new rate increase goes into effect for this proceeding, the Company should submit to the Director of the Utilities Division MCESD documentation stating that its water system is delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards.

Water Testing: The Company reported its water testing cost and operator's expense at a combined cost of $25,756 during the Test Year. Staff Engineering has evaluated the testing costs with consideration of ADEQ's Monitoring Assistance Program ("MAP") and when combined with other testing requirements, the total estimated cost is $9,138. A breakdown of these costs for all testing requirements is shown in Table I.

Table I. Water Testing Cost

Monitoring – 3 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per 3 years	Total 3 year cost	Annual Cost
Bacteriological – monthly	$15	216	3,240	1,080
Inorganics – Priority Pollutants	$240	3	720	240
Radiochemical – per 4 years				
Gross Alpha	$55	12	660	165
Phase II and V:				
Nitrate - annual	$25	36	900	300
Nitrite – once per period	$15	3	45	5
Asbestos – per 9 years	$180	3	540	60
MAP – IOCs, SOCs, & VOCs	MAP	MAP	MAP	5,955
Lead & Copper - annual	$25	160	4,000	1,333
Totals				$9,138

Note: ADEQ's MAP invoice for the 2001 calendar year was $5,954.87.

Arsenic: The U.S. Environmental Protection Agency ("EPA") has announced that the arsenic standard in drinking water will be reduced from 50 parts per billion ("ppb") to 10 ppb by 2006. The most recent lab analysis by the Company indicated that the arsenic levels in its source supply are Well #1 at 5 ppb, Well #2 at 8 ppb, Well #3 at 8 ppb and Well #6 at 16 ppb. Based on these arsenic levels, the Company will be required to implement a plan to address this issue for Well #6. This could mean installing treatment facilities, locating a better source of water or blending sources of water to achieve 10 ppb or less.

G. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

During the Test Year 2000, the Company pumped less than 250 acre-feet per year. Pumping less than this 250 acre-feet per year is considered a "small provider" by the ADWR and is not subject to the gallons per capita per day ("gpcd") limit and conservation rules. The Company is only required to monitor and report water use. After contact with ADWR's Phoenix Active Management Area office, Staff Engineering learned that the Company is in compliance with these monitoring and reporting requirements.

H. OTHERS

1. Service Line and Meter Installation Charges

The Company does not wish to change its service line and meter installation charges. These charges are shown below and Staff Engineering finds them to be reasonable.

Table II. Service Line and Meter Installation Charges

Meter Size	Company Charges
5/8 x3/4-inch	$410
3/4-inch	$410
1-inch	$520
1/2-inch	$660
2-inch Turbo	$1,155
2-inch Compound	$1,720
3-inch Turbo	$1,625
3-inch Compound	$2,260
4-inch Turbo	$2,500
4-inch Compound	$3,200
6-inch Turbo	$4,500
6-inch Compound	$6,300
8-inch Turbo	$8,200

2. Depreciation Rates

Staff Engineering recommends using its own guidelines for depreciation rates. These rates should be used for annual accrual of depreciation expense on an account-by-account basis upon adoption by the Commission. Table III shows the average service life and the annual accrual rate for each depreciable account.

Table III. Depreciation Rates

Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33

305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

NOTE: Acct. 398, Other Tangible Plant may vary from 5 percent to 50 percent. The depreciation rate would be set in accordance with the specific capital items in this account.

3. System Analysis

The current well capacity of 2,650 GPM and storage capacity of 3,000,000 gallons could adequately serve up to 2,300 service connections with fire flow protection. The system served 1,397 connections during the Test Year 2000.

4. Curtailment Plan Tariff

A Curtailment Plan Tariff is an effective tool to allow a water company to manage its resources during periods of shortages due to pump breakdowns, droughts, or other unforeseeable events. Since the Company does not have this type of tariff, this rate proceeding provides an opportune time to prepare and file such a tariff. Staff recommends that the Company file a Curtailment Plan Tariff within 90 days after the effective date of any decision and order pursuant to this proceeding. This tariff shall be submitted to the Director of the Utilities Division for review and approval. Staff also recommends that this tariff shall generally conform to the sample tariff found as Attachment - CPT to this Engineering Report. Attachment - CPT is offered as a template and Staff recognizes the suitability and right of the Company to modify this attachment according to their specific management, operational, and design requirements.

Utility: New River Utility Company
Docket No.: W-01737A-01-0662
Phone No.: _____

Tariff Sheet No.: 1 of 3
Decision No.: _____
Effective: _____

CURTAILMENT PLAN FOR NEW RIVER UTILITY COMPANY

ADEQ Public Water System Number: 07-051

New River Utility Company ("Company") is authorized to curtail water service to all customers, residential and commercial, within its certificated area under the following terms and conditions:

Stage 1 Exists When:

Company is able to maintain water storage in the system at 100 percent of capacity and there are no known problems with its well production or water storage in the system.

Restrictions: Under Stage 1, Company is deemed to be operating normally and no curtailment is necessary.

Notice Requirements: Under Stage 1, no notice is necessary.

Stage 2 Exists When:

a. Company's total water storage or well production has been less than 80 percent of capacity for at least 48 consecutive hours, and

b. Company has identified issues such as steadily declining water table, an increased draw-down threatening pump operations, or poor water production creating a reasonable belief the Company will be unable to meet anticipated water demands in the system.

Restrictions: Under Stage 2, the Company may request the customers to voluntarily employ water conservation measures to reduce water consumption by approximately 50 percent. Outside watering should be limited to essential water, dividing outside watering on some uniform basis (such as even and odd days) and eliminating outside watering on weekends and holidays.

Notice Requirements: Under Stage 2, the Company is required to notify customers by delivering written notice door to door at each service address, or by United States first class mail to the billing address or, at the Company's option both. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.

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Stage 3 Exists When:

a. Company's total water storage or well production has been less than 50 percent of capacity for at least 24 consecutive hours, and

b. Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 3, Company shall request the customer to voluntarily employ water conservation measures to reduce daily consumption by approximately 50 percent. All outside watering should be eliminated, except livestock, and indoor water conservation techniques should be employed whenever possible.

Notice Requirements:

1. Company is required to notify customers by delivering written notice to each service address, or by United States first class mail to the billing address or, at the Company's option both. Such Notice shall notify the customers of the general nature of the problem and the need to conserve water.

2. Beginning with Stage 3, Company shall post at least two (2) signs showing the curtailment stage. Signs shall be posted at noticeable locations, like at the well sites and at the entrance to the major subdivision served by the Company.

3. Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering stage 3.

Utility: New River Utility Company
Docket No.: W-01737A-01-0662
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Tariff Sheet No.: 3 of 3
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Stage 4 Exists When:

a. Company's total water storage or well production has been less than 25 percent of capacity for at least 12 consecutive hours, and

b. Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 4, Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. Failure to comply will result in customer disconnection. The following uses of water shall be prohibited:

- Irrigation of outdoor lawns, trees, shrubs, or any plant life is prohibited
- Washing of any vehicle is prohibited
- The use of water for dust control or any outdoor cleaning uses is prohibited
- The use of drip or misting systems of any kind is prohibited
- The filling of any swimming pool, spas, fountains or ornamental pools is prohibited
- Restaurant patrons shall be served water only upon request
- Any other water intensive activity is prohibited

Notice Requirements:

1. Company is required to notify customers by delivering written notice to each service address, or by United States first class mail to the billing address or, at the Company's option, both. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.

2. Company shall post at least two (2) signs showing curtailment stage. Signs shall be posted at noticeable locations, like at the well sites and at the entrance to the major subdivision served by the Company.

3. Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering stage 4.

Customers who fail to comply with cessation of outdoor use provisions will be given a written notice to end all outdoor use. Failure to comply with in two (2) working days of receipt of the notice will result in temporary loss of service until an agreement can be made to end unauthorized use of outdoor water. To restore service, the customer shall be required to pay all authorized reconnection fees.